Evaluation

of the

Louisiana Technology Initiatives:

1999 - 2000

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EXECUTIVE SUMMARY

The Louisiana Technology Initiative expended approximately $27,149,355 on technology and staff development in public and non-public schools during the 1999-2000 school year. Of this amount, $17,107,593 came from the Classroom Based Technology Fund (CBTF) and $10,592,272 from the Technology Literacy Challenge Fund (TLCF). The CBT funds were further divided, with $14,045,733 allocated directly to public schools, approximately $46,808 going to state special schools, $2,968,031 awarded to non-public schools. From the TLCF $4,197,620 awarded as Professional Development Grants to consortia of districts and/or Dioceses and universities. Four new Teaching, Learning, and Technology Centers were funded with these grants, making a total of nine TLTC centers that serve as regional extensions of LCET for training. Five percent of the $10,592,272 TLCF funds received from the USDE, approximately $529,614, was used for state level activities, mainly at the Louisiana Center for Educational Technology.

CBTF funds were distributed to districts and schools using an RFP procedure with allocations based on a per pupil basis. TLCF funds were competitively awarded to all districts based on high poverty need. Proposals were developed based on district/school technology plans that were approved by the state and which addressed the State Technology Goal and the four National Goals. Funds were primarily used for developing technology-rich instructional rooms, connecting to the Internet, purchasing software and computer peripherals, and conducing professional development activities. The professional development activities emphasized the integration of technology into curricula, aligning curriculum to state content standards through technology, and most were based on the LA INTECH model developed by the LCET staff.

In June 2000, the student to computer ratio for public schools was 5.5:1, when considering all types of computers. The state has reduced the ratio from 8:1 in 1997, and brought it very close to the National goal of 5 students to each computer. For the non-public schools the ratio was 6.3:1. When only high-end computers are considered, the ratio is 8.2:1 for public and 8.5:1 for non-public schools. The state has made remarkable progress in this area, decreasing the ratio from 48:1 for both public and non-public schools in 1997.

The percentage of computers with Internet access increased in 2000 to 54% from 49% in 1999 for public and to 69% from 61% for non-public schools. Ninety-four percent (94%) of the public schools and 97% of the non-public schools now have Internet access, almost doubling the rates in 1997. Internet connections via direct link increased from 76% to 91% for public and from 61% to 77% for non-public schools this year.

The percentage of public school teachers at the beginner level in using technology has dropped from 41% in 1999 to 33% in 2000; non-public beginners dropped from 37% to 24%. The intermediate levels of 41% and 37% respectively showed small gains, but advanced and instructor percentage levels dropped in both categories compared to last year. Concerning training and support for teachers, 91% of public and 87% of non-public schools reported having a person responsible for supporting teachers and assisting them with the integration of technology into the curriculum. The same percentages of schools, 91% public and 87% non-public, have a person who helps to maintain and support hardware and software in the schools. Sixty-three percent (63%) of public and 53% of non-public schools are now requiring that teachers demonstrate technology skills for employment at their schools.

Data show that 1,343 professional development sessions were presented in Louisiana involving 12,755 participants, of which 10,837 were teachers. Sessions were in the categories of: LA INTECH, Integration of Technology, Application Software/Skills Training, Technical Support Training, and Administrative Training/Issues. Ratings on the overall effectiveness of training sessions on a scale of 5

to 1, (5= Excellent and 1= Did not meet expectations) provided mean scores of 4.64 for public school teachers and 4.68 for non-public school teachers, indicating that participants were very pleased with the training sessions. LA INTECH, the state model for integrating technology into standards-based lessons, accommodated 2,081 public and 132 non-public school teachers. Each participant was trained to redeliver the model at the local level, and the standards-based lessons they developed were posted on LCET and TLTC Web pages. Courses for university credit were taken by 497 participants.

All districts in the state, 86% of public schools, and 93% of non-public schools have long-range technology plans. This year 63% of public districts and 73% of dioceses and non-public schools have revised their plans. Goals were increasingly targeted at student achievement, and are beginning to connect school accountability and reform to the technology initiative.

Local efforts for installing technology infrastructure and training educators to use it effectively to improve student achievement is quite evident in school and district technology budgets. Public schools budgeted a total of $4,349,286.39 for technology, which included computer hardware and other peripherals, software, professional development, telecommunications, networking, distance learning, and service and support. Non- public schools budgeted $4,685,049.11 for technology. At the district levels, public school technology budgets totaled $64,672,958 and non-publics totaled $2,122,623. In addition, technology coordinators reported the dollar value of their E-rate discounts to be $33,833,413 for the 1999-2000 school year.

The Louisiana Technology Initiative for 1999-2000 has demonstrated a significant gain compared to previous years. In the first three years, the Initiative was very successful in placing technology into classrooms, and providing rich resources and basic introductory training for faculties and staffs. In this fourth year, tremendous gains have been made in professional development of all educators for integrating technology into curricula and for using that training as a reform agent for all teaching and learning in Louisiana. State accountability plan measures, especially student achievement scores, appeared in plans and goals more than ever before, indicating that many districts and schools have the hardware and trained personnel in place, and are now focusing of real changes in teaching and improvements in student performances.

The Governor, Legislature, Board of Elementary and Secondary Education, Louisiana Department of Education, Louisiana Center for Educational Technology and participating businesses and industry are to be applauded for their vision, leadership, funding, and active support of this Initiative. The school children of Louisiana are the benefactors of this continuing program, and in subsequent years, the State at large. In order for this Initiative to support the State Accountability Plan, the stakeholders must continue to fund purchases of hardware and software, provide facilities, opportunities and funding for professional development and ensure that universities provide pre-service teacher education programs and partnerships with practicing teachers that ensure appropriate content area knowledge and skills to integrate technology into the curricula.

Results from data collected by Quality Education Data, Inc. (QED) 1997,1998, 1999 and Louisiana Technology Surveys 2000									
		RESULTS							
GOAL	**EVALUATION**	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Publi Schools 2000
All educators and learners will have	Ratio of students to **all computers** in schools	**8:1**	**8:1**	**6.0:1**	**5.5:1**	**11:1**	**8:1**	**6.7:1**	**6.3:1**
access to technologies that are effective in	Ratio of students to **high-end computers** in schools	**48:1**	**19:1**	**10.5:1** [1]	**8.2:1**	**48:1**	**18:1**	**10.7:1** [1]	**8.5:1**
improving student achievement.	Percent of **computers** with **Internet access.**	*	*	**49%**	**54%**	*	*	**61%**	**69%**
All teachers will have the training and support they need to help all students learn through	Percentage of schools that have a person responsible for providing teachers with support and assistance in integrating technology into the curriculum.	**76%**	**77%**	**100%**	**91%**[2]	**66%**	**99%**	**99%**	**87%**[2]
computers and through the	• School-based	*	*	*	**53.4%**	*	*	*	**80.8%**
Information superhighway	• Not school-based	*	*	*	**79.9%**	*	*	*	**35.5%**
	Percentage of schools that have a person who helps to maintain and support hardware and software in the school.	**82%**	**98%**	*	**91%**[2]	**65%**	**99%**	*	**87%**[2]
	• School-based	*	*	*	**38.4%**	*	*	*	**68.4%**
	• Not school-based	*	*	*	**86.1%**	*	*	*	**55.5%**
	Estimated percentage of teachers at each skill level in the use of technology in instruction.	Percent	Mean Percent[3]	Percent	Percent	Percent	Mean Percent[3]	Percent	Percent
	• Non-User	*	*	*	**06.7%**	*	*	*	**04.8%**
	• Beginner	**40%**	**50%**	**41%**	**33%**	**38%**	**45%**	**37%**	**24%**
	• Intermediate	**27%**	**37%**	**41%**	**43%**	**26%**	**39%**	**44%**	**49%**
	• Advanced	**8%**	**15%**	**18%**	**12%**	**8%**	**18%**	**22%**	**18%**
	• Instructor	*	**8%**	**8%**	**4%**	*	**8%**	**8%**	**5%**
All teachers and students will have a modern computer in	Percentage of computers in instructional rooms, computer labs and library media centers.	*	**92%**	**93%**	**93.2%**	*	**87%**	**87%**	**88.3%**
their	Percentage of								

classrooms.	**instructional rooms** with Internet access	*	*	51%	55%	*	*	63%	56%
Data from QED Reports and Louisiana Technology Surveys - Continued									
Every classroom	Percentage of **schools** that have access to the Internet.	56%	84%	91%	94%	58%	88%	92%	97%
will be connected to the information	• Percentage of these schools that have access to the Internet via direct link.	35%	49%	76%	91%	15%	38%	61%	77%
Superhigh way.	• Percentage of these schools that have access to the Internet via dial-up link.	53%	40%	20%	9%	80%	51%	33%	22%
	• Percentage of these schools that have access to the Internet by satellite	*	*	0.2%	0.2%	*	*	0.9%	0.9%
	Percentage of **computers** with Internet access in instructional rooms.	*	*	24.4%	49%	*	*	23.6%	60%
	Percentage of **schools** that have computers in class-rooms, labs, or Media Center(s) connected through LANs (local area networks)	33%	64%	77%	72%	27%	57%	71%	74%
	Percentage of **schools** that are connected to another school or schools through a WAN (wide area network).	27%	68%	66%	62%[4]	6%	30%	13%	13.8%[4]
Effective and engaging software and	Percentage of **students** who participate in distance learning	*	*	*	1%	*	*	*	3%
on-line resources will be an integral part of	Percentage of **schools** with students who participate in distance learning		38%	17.2%	10%		25%	13%	9%
every school curriculum	Percentage of **teachers** who participate in distance learning	*	*	23%	14%	*	*	22%	14%
Every system or independent their their	Percentage of schools that have a technology plan	73%	90%	94%	86%	58%	88%	92%	93%
school will engage in long range planning for	Percentage of schools that have reviewed their plans for technology within the last year	87%	99%	78%	68%	94%	97%	75%	83%
technology.i n the schools	Percentage of classrooms in schools that were devel-oped based on the Model Classroom in the Louisiana State	*	*	15%	4%	*	*	11%	0%

v   v

	Technology Plan.							

* Data were not collected.

[1] Ratios for 1998-99 and 1999-00 did not include 486 type computer, whereas previous years did..

[2] Data for 2000 represents school-based only; school and district persons counted in previous years

[3] Results were presented in a different format

[4] Data for 3 previous years represented both <u>school and administration</u> buildings.

Evaluation of the Louisiana Technology Initiative: 1999-2000

Professional Development for Louisiana Educators Data from Evaluation of Training Form									
	Teachers	School Admin.	Central Office Admin.	Support Staff	Dept. of Educ.	University	Parapro- fessionals	Parents	**Total**
Number of Participants	10,837	367	143	607	153	41	445	26	**12,755**
Training For									
• University Credit	462	17	6	7	0	1	3	1	**497**
• Non-Credit	10,375	350	147	600	279	40	442	25	**12,258**
Type of Training									
• LA INTECH	2,251	50	36	60	18	15	11	1	**2,442**
• Integration of Technology	3,560	64	26	88	14	21	91	4	**3,868**
• Application Software/ Skills Training	4,115	183	79	375	246	5	279	17	**5,300**
• Technical Support Training	254	14	4	15	0	0	21	1	**309**
• Administrative Training/ Issues	136	28	3	28	1	0	6	1	**203**
• Intro. To Basic Computer Literacy	520	28	5	41	0	0	37	2	**633**
Professional Development Requested									
• Technology Integration	4,818	144	50	143	54	23	115	4	**5,351**
• Accountability	1,595	113	35	74	47	13	68	0	**1,942**
• Standards-Based Lessons	4,590	108	25	133	30	13	153	3	**5,055**
• Word Processing	2,593	106	25	248	85	8	182	7	**3,254**
• Data Base/Spreadsheet	2,362	123	51	229	122	21	106	9	**3,023**
• Troubleshooting	3,721	128	53	232	62	19	182	14	**4,411**
• Networking	2,615	109	49	179	53	13	141	4	**3,163**
• Internet	4,393	135	44	235	69	14	215	3	**5,108**
• Presentation Software	3,635	103	37	153	64	22	130	4	**4,148**
• Classroom Management	3,769	82	18	64	13	18	124	0	**4,088**
• One Computer Classroom	3,941	87	33	53	15	7	98	0	**4,234**
• Other	314	16	7	26	13	2	26	1	**405**

Overall Ratings for Professional Development Sessions A = Excellent B = Good C = Satisfactory D = Unsatisfactory F = Did not meet expectations A = 5 B = 4 C = 3 D = 2 F = 1	
	Mean Scores
1. Information was presented in an organized manner.	4.71
2. Handouts were useful.	4.72
3. Training materials were appropriate to participants' level of experience.	4.60
4. Trainer presented information in well-organized manner.	4.73
5. Overall effectiveness of training session.	4.64

Number of Training Sessions in the State	1,343
Number of Hours of Training in the State	15,609

Professional Development for Public School and Non-Public School Teachers
Data from Evaluation of Training Form

	Public School Teachers		Non-Public School Teachers	
Number of Participants	10,187	**94%**	650	**6%**
Training For				
• University Credit	401	**4%**	61	**9%**
• Non-Credit	9,786	**96%**	589	**91%**
Type of Training				
• LA INTECH	2,018	**20%**	233	**37%**
• Integration of Technology	3,403	**33%**	157	**24%**
• Application Software/ Skills Training	3,894	**39%**	222	**34%**
• Technical Support Training	239	**2%**	15	**2%**
• Administrative Training/ Issues	133	**1%**	3	**0%**
• Intro. To Basic Computer Literacy	500	**5%**	20	**3%**
Future Professional Development Requested	Public Teachers	Non-Public Teachers	**ALL Teachers**	
• Technology Integration	4,531	311	4,818	
• Accountability	1,517	88	1,592	
• Standards-Based Lessons	4,382	236	4,590	
• Word Processing	2,423	180	2,593	
• Data Base/Spreadsheet	2,187	178	2,362	
• Troubleshooting	3,468	267	3,721	
• Networking	2,437	180	2,615	
• Internet	4,134	266	4,393	
• Presentation Software	3,610	236	3,625	
• Classroom Management	3,521	256	3,769	
• One Computer Classroom	3,665	264	3,941	
• Other	280	34	405	

Overall Ratings for Professional Development Sessions
A = Excellent   B = Good   C = Satisfactory   D = Unsatisfactory   F = Did not meet expectations
A = 5   B = 4   C = 3   D = 2   F = 1

	Mean Scores Public	Mean Scores Non-Public
1. Information was presented in an organized manner.	**4.72**	**4.64**
2. Handouts were useful.	**4.72**	**4.66**
3. Training materials were appropriate to participants' level of experience.	**4.61**	**4.51**
4. Trainer presented information in well-organized manner.	**4.73**	**4.66**
5. Overall effectiveness of training session.	**4.64**	**4.68**

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BACKGROUND AND SETTING

The Louisiana Technology Initiative had its inception in 1987 when the state first received funds for the *Louisiana Educational Quality Support Fund (LEQSF)* commonly called the *8(g)* fund. In 1994 a $78,000 technology grant was awarded under the *GOALS 2000: Educate America Act* to form the *Louisiana GOALS 2000 Program*, which existed as such from July 1994 through December 1995. Through a *National Science Foundation (NSF)* grant to the *Louisiana Systemic Initiative Program (LASIP),* the *Louisiana Networking In Education (LANIE)* project was implemented, focusing on putting technology into Louisiana classrooms. In 1995 the state was awarded a $4.3 million *Technology Innovative Challenge Grant* by the U.S. Department of Education to design model technology programs at five pilot sites. This was a major milestone in the focus on technology as a reform tool for changing pedagogy in Louisiana schools.

In January 1996, The Louisiana GOALS 2000 program was renamed *Louisiana LEARN for the 21st Century: An Educational Initiative (LA LEARN)* and a comprehensive reform effort to develop a long-term improvement plan for all aspects of the state educational system was created. The Louisiana Board of Regents, State Department of Education, the Board of Elementary and Secondary Education (BESE), and LASIP worked together to develop a State Education Plan, with technology as a major state objective *LA LEARN* came under the auspices of the newly created *Louisiana Education Achievement and Results Now (LEARN) Commission*, in March 1996, which proposed that various educational and legislative entities in the state begin planning for the incorporation of technology into the educational process in schools at all levels.

The state applied for and received $5.3 million of *Technology Literacy Challenge Fund (TLCF*) funds for the 1997-98 school year in the spring of 1996, to be used for meeting the mandates of the National Technology Goals. *The Classroom-Based Technology Fund (CBTF)* was also established and funded, that year by the Louisiana State Legislature, providing another $38.2 million for the integration of technology into all Louisiana classrooms. A comprehensive plan for impacting all schools and levels of education in the state was developed. It included the development and adoption of the State Technology Plan, the establishment of *the Louisiana Center for Educational Technology (LCET)* in the *Louisiana Department of Education (SDE),* the passage of legislation for providing state funding for technology, defining allocation formulas, and the development of an application process for distributing both state and federal funds equitably.

During the 1998 regular session, the Louisiana Legislature once again allocated moneys for *The Classroom-Based Technology Fund (CBTF)*, amounting to $25 million for the 1998-99 school year. Louisiana was also awarded a $10.2 million federal *Technology Literacy Challenge Grant (TLCF)* to provide for training and

professional development to help ensure successful integration of technology in the classroom and to meet the mandate of the National Technology Goals.

In 1999, the Technology Initiative was continued when the Louisiana Legislature allocated $14,037,250 for *The Classroom-Based Technology Fund (CBTF)* and the federal government awarded to Louisiana $10,592,272 in federal *Technology Literacy Challenge Grant (TLCF)* funds

The Louisiana Center for Educational Technology (LCET) was created within the Louisiana Department of Education to administer the funds and carry out the mandates of the granting agencies. Dr. Carol Whelan was appointed Director of LCET and continued in that role until the spring of 2000, when she became Assistant Superintendent of Quality Educators. At present, Chris O'Neal is serving as Director of LCET. Louisiana is continuing its commitment to improve education through the integration of technology and learning through the awarding of grant moneys to districts, private schools and professional development consortia to continue efforts to carry out the State Educational Technology Goal:

> "*All educators and learners will have access to technologies*
> *that are effective in improving student achievement".*

SOURCES OF FUNDING

Technology Literacy Challenge Fund

Congress passed the *Improving America's Schools Act (IASA)* in 1994 to provide support for key elements of systemic education improvement efforts. Technology's potential for helping to accomplish these reforms by broadening teacher and student access to educational resources and accelerating student learning was quickly recognized. The result is *Title III, Technology for Education.* The broad purpose of Title III is to help develop and support "a comprehensive system for the acquisition and use by elementary and secondary schools in the United States of technology and technology-enhanced curricula, instruction, and administrative support resources and services to improve the delivery of education services" (ESEA, Title III, Part A, section 3112).

Programs and activities funded under Title III include the *School Technology Resource Grants (Technology Literacy Challenge Fund)*, which funds states and local school districts to use technology to implement educational technology plans to improve teaching and learning. The *TLCF* was first funded in fiscal year 1997, two years after the development of the national technology plan and the four pillars, which provide a focus for infusing technology effectively into classrooms to improve teaching and learning. The focus of the *TLCF* is on the classroom, with at least 95 percent of funding provided to local educational agencies (LEAs). The requirements in the

authorizing statute are intended to ensure that LEAs use their funds in ways likely to lead to improved classroom instruction and student achievement.

Louisiana was awarded **$10,592,272** million from this fund in 2000. Five percent of the total Louisiana TLC funds, **$529,614**, was used by the Louisiana Center for Educational Technology for administrative costs, including staffing, technical assistance workshops, professional development institutes, developing materials, etc., associated with the federal TLCF program and the state CBTF program. . The adjusted budget available for schools was **$10,062,678**. States receiving these funds were strongly encouraged to marshal together resources at all levels -- local, state, federal, and the private sector -- in a systemic plan of action to meet the President's four goals and to describe in their statewide technology plans how they would address those goals. They were encouraged to draw on several other federal resources, including *the Technology Innovation Challenge Grants*, the *Universal Service Fund*, *six Regional Technology in Education Consortia*, *Statewide NetDay events*, *Tech Corps*, the *21st Century Teachers*, and the *American Technology Honor Society*. Several requirements were attached to the application, including:
- the state had to have a state technology plan;
- assistance to school districts with the highest numbers or percentages of children living in poverty and with the greatest need for technology had to be a priority;
- Section 427 of the General Education Provisions Act (GEPA), which requires that applicants describe how they will ensure equitable access to, and participation in, its federally assisted program for students, teachers, and other program beneficiaries with special needs, had to be honored;
- provision for state-approved non-public schools to participate in the development of plans for professional development and actual professional development activities.

Classroom-Based Technology Fund

The Classroom-Based Technology Fund was established by House Bill No. 1911 during the Regular Session, 1997 to enact R.S. 17:3921.2, to provide moneys for the fund, to create the State Technology Advisory Committee (STAC) to oversee it, and to develop procedures and guidelines relative to the awarding of the grant funds. The bill provided **$38,200,000** in 1997 "for the purpose of improvement of student learning through technology within Louisiana's school districts", and included charter schools approved by school district boards or by the state chartering authority, all elementary and secondary schools operated by the Board of Elementary and Secondary Education (BESE), elementary and secondary schools operated by Louisiana State University, Southern University and the Department of Public Safety and Corrections, the Louisiana School for Math, Science and the Arts, and all certified elementary and secondary non-public schools. The initiative was refunded during the 1998 regular session for $25 million.

During the 1999 regular session of the Louisiana Legislature, the CBTF fund was continued and funded for **$ 14,037,250**.

APPLICATION PROCESS

Under the advisement of directors Dr. Carol S. Whelan and Chris O'Neal and the staff at the Louisiana Center for Educational Technology, plans were developed and executed for :

- the awarding of the CBTF and TCLF grant moneys to public school districts, Diocesan systems, non-public schools and special state schools;
- the awarding of TLCF funds for district and school activities and regional Professional Development Centers;
- design and delivery of exemplary professional development models for integrating technology into classrooms;
- leadership, guidance and assistance to districts, consortia, and non-public schools for meeting mandates of the funding entities and applications.

Two types of technology grants were designed for the 1999-2000 funding period:
1) CBTF/TLC Technology Improvement Grants, and
2) TLC Professional Development Grants.

CBTF moneys were used to award **Technology Improvement Grants (TIGs)** to school systems (LEAs and Diocesan systems) and to independent schools (special schools, laboratory schools, and state-approved non-publics). TLCF moneys were competitively awarded in two categories: (a) as a component of Technology Improvement Grants awarded to LEAs and independent public schools, and (b) as separate **TLC Professional Development Grants** to consortia composed of one or more LEAs and institutions of higher education, libraries, or other educational entities appropriate to local programs.

CBTF/TLC Technology Improvement Grants

The Application Packet for Technology Improvement Grants (See *Appendix A - Louisiana's Classroom-Based Technology Fund and Technology Literacy Challenge Fund Application Packet for Technology Improvement Grants - 1999-2000*) combined the two funds, with the Classroom-Based Technology Fund (CBTF) moneys targeted at the purchase of equipment. Funds were allocated for all public and state approved nonpublic schools and determined by using a formula based solely on student population. (See *Appendices C and E -Allocations*).

The federally funded Technology Literacy Challenge (TLC) funds were awarded on a competitive basis to **public** local education agencies and independent public schools only, as per federal guidelines. Moneys could be used for all items identified for CBTF funds and for professional development activities, including college tuition, stipends,

salaries, substitutes, professional services, conferences, etc. Applicants who qualified and met the competitive standards of the RFP were awarded grants up to a maximum amount based on the number and percentage of students living in poverty as represented in district free-lunch counts on file in the Louisiana Department of Education. (See *Appendix D - 1999-2000 Technology Literacy Challenge Fund Allocations* for designated amounts.)

The Application addressed the following funding and instructional priorities
- maximizing the use of technology among a targeted number of students in classrooms and schools with a genuine need for expanded technologies and with genuine commitment to effectively integrate technology into the curriculum to improve student learning;
- support of local school system preparations for educational accountability;
- making strong connections with system/school improvement plan(s).
- focusing on one or more of the following curriculum areas: mathematics, science, reading, language arts, or social studies.
- limiting the number of schools or grade levels impacted by the grant
- addressing one or more of the purposes/models provided in the packet.

Applicants were also required to have a school plan for technology at impacted schools, annual updates of the system technology plan, demonstrate increasing commitments to achieving the state technology goal and the national technology goals through the establishment of a ***Teaching, Learning, and Technology Council (TLTC)***, increase coordination of federal and state funds to support teaching, learning, and technology, and establish and maintain electronic communication connections to the Internet for EVERY school and all district and school technology leaders.

TLCF Professional Development Grants

A major focus of the 1999-2000 initiative was the development and implementation of professional development programs for teachers, administrators, and other educators. Toward this end, **$4,197,620** of TLCF funds was awarded to three types of consortia. Grants were aimed at enhancing ongoing efforts to improve teaching and learning using technology and supporting local school systems in preparations for the state's new accountability program, so applicants were required to include at least one LEA with a high percentage or number of children living below the poverty line. The Application Packet for the Professional Development Grants (See Appendix B - *Louisiana's Technology Literacy Challenge Fund Application Packet for Professional Development Grants - 1999-2000*) offered up to $440,000 to consortia, each consisting of a Local Education Agency (LEA) and partners, which could include other LEAs, special schools, nonpublic systems, private schools, institutions of higher education, businesses, academic content experts, museums, libraries, public broadcasting stations, or other appropriate organizations. State-approved non-public schools, though not eligible for these funds, had to be provided opportunities to participate. Grantees were required to provide professional development activities on

the integration of technology into a standards-based curriculum to educators in their geographic areas..

Three types of proposals were accepted:
1. **Teaching, Learning, and Technology Centers (TLTCs) Continuation Awards.** Four Grants funded during 1998-99 established **Teaching, Learning, and Technology Centers (TLTC)** which served as extensions of the LCET training program. These centers were eligible to compete for funding that would allow them to continue and expand their professional development activities. Each could apply for a maximum of $150,000.

2. **Teaching, Learning and Technology Centers (TLTCs).** School districts could apply to establish new TLT Centers, which would serve as extensions of the LCET training program. Maximum amounts to be awarded were $175,000 each..

3. **District/Consortium Professional Development Grants.** School districts could apply alone or in consortia with other districts for funds to improve their professional development activities. Priorities included a well-defined professional development concept for preparing new teachers and supporting experienced teachers to teach effectively using technology, developing and/or strengthening partnerships between K-12 institutions and higher education institutions, and use of the *ISTE National Standards for Technology in Teacher Preparation.* Grants ranged from $90,000 for individual districts to $440,000 for consortia with 4 or more districts.

REVIEW PROCESS

LCET developed timelines for submitting proposals for the *Technology Improvement Grants* and the *Professional Development Grants,* as well as dates for reviewing the proposals, submitting them to the State Technology Advisory Committee (STAC) and then to the BESE board for approval.

For the *Technology Improvement Grants*, reviewers who possessed technical and instructional expertise were selected and each team was assigned a contact person from the LCET staff who worked closely with them to answer questions and resolve problems. Applications were classified as "Full Approval", "Approval Contingent Upon Modifications" or "In Need of Further Development". LCET staff worked closely with applicants who did not receive full approval in making required revisions. The applications that were approved with contingencies were fully approved as soon as the revised applications were received and reviewed by the LCET staff for compliance with the recommendations, then sent to the STAC and BESE for approval.

Those needing further development had to re-develop their applications according to the review teams' suggestions and resubmit them at the next review session. Contact persons from the LCET staff were assigned to each review team to assist with the modifications.

All deadlines established for 1998-99 Technology Initiative were met as scheduled. Each of the 66 public school districts, seven Diocesan systems, 47 non-public schools, and five special state schools were approved for funding.

Expert review panels with out of state members reviewed the 29 *Professional Development Grant* proposals and placed them in one of three categories: (1) Recommended for Full Funding; (2) Recommended for Partial Funding; (3) Not Recommended for Funding. For each proposal, the panel identified strengths, weaknesses, and suggestions for improvement. Sixteen proposals were recommended for full funding, six were recommended for partial funding; one for additional funding, and seven proposals were not recommended for funding.

FUNDS DISTRIBUTION

Carryover funds, those allocated but not claimed during the 1998-99 grant period, amounting to **$3,070,343** were added to the **$14,037,250** received from the Classroom-Based Technology Fund. for a total or **$17,107,593.** Districts and state schools were awarded **$14,139.349.00**. Each of the 66 public school districts, special state schools, and one Charter school received these funds as a component of the *Technology Improvement Grants*. The funds provided a per-pupil distribution of **$19.37** for 883,141 public school students.
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Forty-seven non-public schools and seven dioceses received **$2,968,031.66** for a per-pupil distributions of **$23.88** for 124,264 students. (See *Appendix C - 1999-2000 Classroom-Based Technology Allocations - Public Schools* and *Appendix E - 1999-2000 Classroom-Based Technology Allocation s- Non-Public Schools*).

Of the total **$10,592,272** Technology Literacy Challenge Grant, **$5,844,142** was awarded competitively to the 66 public school districts, 5 state schools and one charter school as a component of the *Technology Improvement Grants*. The awards were based on high poverty need, with a per pupil allocation of **$6.62.** Twenty-three Professional Development Grants totaling **$4,197,620** were awarded to consortia for providing additional technology training for Louisiana educators. Professional Development Grant Awards 1999-2000 can also be found on-line at <http://www.doe.state.la.us/DOE/lcet/TLCaward.asp> The remaining **$529,614.00** covered administrative costs at the Louisiana Center for Educational Technology.

Funds were awarded to applicants who had been approved by the Department of Education, State Technology Advisory Committee, and the Board of Elementary and Secondary Education (BESE).

GOALS AND OBJECTIVES

In an effort to improve student performance and better prepare students for the future work force, a united effort was initiated to provide students in Louisiana schools with greater access to technology. In the development of a State Plan for Technology, the various stakeholders and agency representatives chose one state goal and adopted the four national goals. They are:

State Technology Goal

♦ All educators and learners will have access to technologies that are effective in improving student achievement.

National Technology Goals

♦ All teachers will have the training and support they need to help all students learn through computers and through the information superhighway.

♦ All teachers and students will have modem computers in their classrooms.

♦ Every classroom will be connected to the information superhighway.

♦ Effective and engaging software and on-line resources will be an integral part of every school curriculum.

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EVALUATION DESIGN

The Evaluation design was influenced by several factors at both the state and national levels. At the state level, it was decided that a technology survey was needed that better fit the needs of the state, rather than use the Quality Education Data (QED) forms again. Also, from feedback about the *Evaluation of Training Form*, it was decided that a less time consuming instrument was needed. At the national level, the USDE had begun using an on-line data base which would require subgrantees to enter data about their TLCF grants that had not been previously collected. Therefore, most of the data collection instruments used in previous years had to be redesigned and some new ones created.

The purpose of the 1999-2000 Louisiana Technology Evaluation Project was four-fold. One, the availability and extent of the use of technology in state schools is always

important to stakeholders. For collecting these data, the Evaluation team designed two new instruments, *The Louisiana District Technology Survey* and *The Louisiana School Technology Survey*. These surveys collect data on a variety of fronts, including number and types of computers in schools and classrooms, connections to the Internet, skill level of teachers and administrators, funding for technology, and extent of technology planning. Items were grouped around the State Technology Goal and the four National Technology Goals to aid in reporting the extent to which each had been attained. Principals from every public and non-public school in the state and technology coordinators from each district and state school were required to submit the on-line surveys. The forms can be found in *Appendix F - The Louisiana District Technology Survey 1999-2000* and *Appendix G - The Louisiana School Technology Survey 1999-2000*, as well as on-line at: <http://www.lcet.doe.state.la.us/submissions/TechSurvey/index.asp>

Two, the professional development survey form was redesigned to provide data on all professional development sessions pertaining to technology in the state. The form solicits information about types of participants and training, provider of the training, grade level and subjects taught, level of expertise, and also requires respondents to assign grades that indicate the effectiveness of the presentation and the session in general. A copy of the *Evaluation of Training Form* is found in *Appendix H*, as well as on-line at: <http://www.lcet.doe.state.la.us/submit/trainingEvalSQL/Training%20Evaluation%20Form.doc>

Three, the *End of Year Report* (EOY) forms used in previous years were redesigned to better collect data required by the USDE on their on-line data collection instrument, the *Technology Literacy Challenge Fund Performance Report for Subgrantees.* These forms were completed by technology coordinators for each district, consortia, state school, diocese, and non-public school that received CBTF funding, addressed the extent to which the State Technology Goal and the national Four Pillars were met, and required entry of the subgrantees' goals, strategies, measures, baseline and current status of actions, as well as the anticipated status by September 2002. Districts and Consortia were also required to submit data pertaining to the use of Technology Literacy Challenge Funds. The *End of Year Report for Districts and State Schools*, can be found in *Appendix I* and the *End of Year Report for Non-Public Schools* can be found in *Appendix J.*

Four, the *End of Year Report for the Louisiana Center for Educational Technology 1999-2000* form was completed by the Director and staff of LCET to assess the extent that objectives of the State Technology Plan had been met as well to collect data needed for the *Technology Literacy Challenge Fund Performance Report for States*. The LCET form can be viewed in *Appendix O.*

All information was submitted on-line and collected in databases on the LCET servers. Completed forms were then posted on the Louisiana Department of Education Web

page at <http://www.lcet.doe.state.la.us/submissions/> and served to share ideas and accomplishments and verifying which reports had or had not been completed. All of these databases were used to ascertain the change in availability and use of technology in 1999-2000 compared to the three previous years. The following section entitled *Data Analysis and Results* contains the various analyses and reports.

DATA ANALYSIS AND RESULTS

Louisiana Technology Surveys 1999-2000

In the three previous years, the Louisiana Department of Education and Quality Education Data (QED) collaborated on the design and implementation of three statewide surveys. The purpose was to establish a baseline for the evaluation of a statewide initiative to enhance the use of technology in all Louisiana classrooms, both public and non-public. Yearly reports provided information on the infrastructure/connectivity of schools to the Internet, availability of hardware and software in instructional settings, the integration of technology into the curriculum, planning for technology integration, and the collaboration between districts and schools with parents, the community, and industry.

The Evaluation team created new surveys for gathering these data in 1999-2000. The *Louisiana School Technology Survey* was completed by **1465** public schools for a **97.6%** rate of response. Two hundred forty-two **242** non-public schools responded, including the schools in the seven Catholic dioceses and 47 non-public schools outside of the dioceses. All grantees were told that subsequent funding for technology would depend on the completion of these forms, which could explains the high rate of completed surveys. In some areas, however, this success may be responsible for drops in percentages, as more surveys were completed, and respondents were more aware of the need for accuracy in their reporting because they knew that submitted forms would be posted on the Internet. Reports on the entire *Louisiana School Technology Survey* are on-line at
<http://www.lcet.doe.state.la.us/submissions/99_00/TechSurvey/SchoolSurvey.htm>
and the *Louisiana District Technology Survey* at
<http://www.lcet.doe.state.la.us/submissions/District_LA_ToTals.htm>.

Results
Questions on the surveys were clustered to provide indicators of attainment of the State Technology Goal, the four National Goals, and the state directive requiring districts and schools to engage in long and short-range planning for technology in the schools. All data in *Table 1,* below, is from the School Surveys, except the items pertaining to the district Technology budgets and Model Classrooms, which came from the District Surveys. Complete results of the surveys can be seen in *Appendix L – Results of Louisiana School Technology Survey1999-2000 - Public and Non-Public Schools* and *Appendix M - Comparison District Surveys – 1997-2000.*

State Technology Goal: All educators and learners will have access to technologies that are effective in improving student achievement.

Indicators aligned to the State Technology Goal show that the state is making admirable progress in attaining this goal. As seen in *Table 1* below, the ratio of students to all types of computers for public schools is **5.5:1** in 2000. The ratio has reduced from 88:1 in 1997, bringing it very close to the National goal of 5 students to each computer. In non-public schools the current ratio is **6.3:1** compared to 11:1 in 1997. When only high-end computers are considered, the student to computer ratio for public schools is now **8.2:1** compared to 48:1 in 1997, 19.1:1 in 1998, and 10.5:1 in 1999,. For non-public schools, this ratio is **8.5:1** compared to 48:1 in 1997, 18:1 in 1998, and 10.7:1 in 1999.

 The percentage of computers with Internet access in public schools has increased to **54%** in 2000 from 49% in 1999, and to **69%** in 2000 from 61% in 1999 for non-public schools.

National Pillar 1: All teachers will have the training and support they need to help all students learn through computers and through the information super highway.

Concerning training and support for teachers, **91%** public schools reported having a person responsible for supporting teachers and assisting them with the integration of technology into the curriculum. The 1999 percentage was 100%, however, the QED survey asked whether a school or district person was responsible, whereas the Louisiana 2000 survey asked this in two separate questions. There was an increase of nine percentage points since 1997. For non-public schools, the percentages were **87%** in 2000 and 99% in 1999, with an increase of 22 percentage points since 1997.

The reported skill levels for the use of technology show percentages of beginners decreasing from 41% in 1999 to **33%** in 2000, and Intermediates increasing from 41% in 1999 to **43%** in 2000. In the Advanced and Instructor categories, where increases would be desirable, percentages have dropped. Larger numbers of respondents along with the change to a new survey instrument may have caused different perceptions of the meanings of these labels.

National Pillar 2: All teachers and students will have modern computers in their classrooms.

The percentage of computers in instructional rooms, computer labs and library media centers showed a small increase, from 93% in 1999 to **93.2%** in 2000 and instructional rooms with Internet access increased to **55%** in 2000 from 51% in 1999. For non-

publics, the percentage of computers in instructional rooms increased 1.3% to 88.3% in 2000, and rooms with internet access decreased 7 percentage points to 55% in 2000.

National Pillar 3: Every classroom will be connected to the information superhighway.

Results concerning <u>computers with Internet access</u> were very impressive, with public schools increasing from 24.4% in 1999 to **49%** in 2000 and non-publics increasing from 23.4% to **60%** in the same period. Pertaining <u>to schools accessing the Internet</u>, access by dial-up link decreased from 20% to **9%** for publics and from 33% to **22%** for non-publics, while more efficient access by direct link for publics increased from 76% to **91%** and for non-publics from 61% to **71%** in the same period.

Connections through local area networks (LANs) and wide area networks (WANs) both deceased in 2000, after showing increases from 1997 to 1999.

National Pillar 4: Effective and engaging software and on-line resources will be an integral part of every school curriculum.

Distance learning became an area of increased interest this year as new courses were made available and Louisiana Virtual Classroom project provided grants and training to teachers to develop on-line courses. Data on <u>the number of students participating in distance learning</u> were collected for the first time this year and showed that 7481 (**1%**) of the state's public school students and 2947 (**3%**) of non-public students participated in distance learning. Most were taking the courses via Web-based Learning, 2,529 public and 905 non-public school students. Telelearning was the next largest category, with 1,817 public schools students and 105 non-public, and then came Satellite classes with 1.260 students from public schools and 480 from non-public schools.

Curiously, the percent <u>of schools with students who participate in distance learning</u> dropped in the 1999-2000 school year, as did the percent of schools with <u>teachers who participate in distance learning</u>.

Ninety percent (90%) of public schools reported that their <u>teachers utilized web resources for instructional support and activities</u> and 76% <u>purchased software for use in instructional rooms</u> last year. For non- publics, the percentages were 96% and 85%, respectively. Eighty-one percent (81%) of public school teachers reported using the Louisiana Department of Education Web site, 72% used on-line libraries and databases, and 95% used other Web sites. For non- public schools the percentages were 61% using LDE Web site, 78% using on-line libraries and databases, and 94% using other Web pages.

Most of these data were not collected in previous years, so growth can not be calculated. However, the large numbers and/or percentages reveal much interest and advancement in accomplishing National Pillar Four.

State Directive: *Every system or independent school will engage in long range planning for technology in the schools.*

Long-range planning for technology has been instrumental to the tremendous gains since the statewide technology initiatives began in 1997. Long range District Technology Plans were required in the Application for CBTF/TLC funds, so 100% of the Districts have answered affirmatively to this question for several years. Concerning School Technology Plans, there was a curious drop from 95.7% last year to 86% in 2000. Forty-one percent (41%) of public schools and 43% of non-public schools wrote plans for two to four years and approximately 40% of each group revised their plans in 1999.

The total budgeted for technology from funds generated by the schools, such as PTO funds, amounted to **$4,349,286.39** for publics and **$4,327,161.11** for non-publics, indicating a very strong interest and commitment to the integration of technology into the teaching and learning process. Districts budgeted **$64,672,958.00** for instructional and administrative technology in 1999-2000. In addition, districts reported the dollar value of their E-rate discounts to be **$33,833,413.00** for the 1999-2000 school year.

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GOAL	EVALUATION	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Publ Schools 2000
All educators and learners will have access to technologies that are effective in improving student achievement	Ratio of students to **all computers** in schools	8:1	8:1	6.0:1	5.5:1	11:1	8:1	6.7:1	6.3:1
	Ratio of students to **high-end computers** in schools	48:1	19:1	10.5:1 [1]	8.2:1	48:1	18:1	10.7:1 [1]	8.5:1
	Ratio of students to **computers** with **Internet access.**	*	*	49%	54%	*	*	61%	69%
All teachers will have the training and support they need to help all students learn through computers and through the information superhighway.	Percentage of schools that have a person responsible for pro-viding teachers with support and assist-ance in integrating technology into the curriculum.	76%	77%	100%	91% [2]	66%	99%	99%	87% [2]
	• School-based	*	*	*	53.4%	*	*	*	80.8%
	• Not school-based	*	*	*	79.9%	*	*	*	35.5%
	Percentage of schools that have a person who helps to maintain and support hardware and software in the school.	82%	98%	*	91% [2]	65%	99%	*	87% [2]
	• School-based	*	*	*	38.4%	*	*	*	68.4%
	• Not school-based	*	*	*	86.1%	*	*	*	55.5%
	Estimated percentage of teachers at each skill level in the use of technology in instruction.	Percnt	Mean Percent[3]	Percent	Percent	Percent	Mean Percent[3]	Percent	Percent
	• Non-User	*	*	*	06.7%	*	*	*	04.8%
	• Beginner	40%	50%	41%	33%	38%	45%	37%	24%
	• Intermediate	27%	37%	41%	43%	26%	39%	44%	49%
	• Advanced	8%	15%	18%	12%	8%	18%	22%	18%
	• Instructor	*	8%	8%	4%	*	8%	8%	5%
All teachers and students will have a modern computer in their classroom.	Percentage of computers in instructional rooms, computer labs and library media centers.	*	92%	93%	93.2%	*	87%	87%	88.3%
	Percentage of **instructional rooms** with Internet access	*	*	51%	55%	*	*	63%	56%

Table 1
Results from data collected by Quality Education Data, Inc. (QED) 1997,1998, 1999 and Louisiana Technology Surveys 2000

RESULTS

Data from QED Reports and Louisiana Technology Surveys - Continued

Goal	Indicator							
Every classroom will be connected to the information Superhighway.	Percentage of **schools** that have access to the Internet.	56%	84%	91%	94%	58%	88%	92%	97%
	• Percentage of these schools that have access to the Internet via direct link.	35%	49%	76%	91%	15%	38%	61%	77%
	• Percentage of these schools that have access to the Internet via dial-up link.	53%	40%	20%	9%	80%	51%	33%	22%
	• Percentage of schools that have access to the Internet by satellite	*	*	0.2%	0.2%	*	*	0.9%	0.9%
	Percentage of **computers** with Internet access in instructional rooms.	*	*	24.4%	49%	*	*	23.6%	60%
	Percentage of **schools** that have computers in class-rooms, labs, or Media Center(s) connected through LANs (local area networks)	33%	64%	77%	72%	27%	57%	71%	74%
	Percentage of **schools** that are connected to another school or schools through a WAN (wide area network).	27%	68%	66%	62%[4]	6%	30%	13%	13.8%[4]
Effective and engaging software and on-line resources will be an integral part of every school curriculum	Percentage of **students** who participate in distance learning	*	*	*	1%	*	*	*	3%
	Percentage of **schools** with students who participate in distance learning		38%	17.2%	10%		25%	13%	9%
	Percentage of **teachers** who participate in distance learning	*	*	23%	14%	*	*	22%	14%
Every system or independent their school will engage in long range planning for technology in the schools	Percentage of schools that have a technology plan	73%	90%	94%	86%	58%	88%	92%	93%
	Percentage of schools that have reviewed their plans for technology within the last year	87%	99%	78%	68%	94%	97%	75%	83%
	Percentage of classrooms in schools that were devel-oped based on the Model Classroom in the Louisiana State Technology Plan.	*	*	15%	4%	*	*	11%	0%

* Data were not collected.
[1] Ratios for 1998-99 and 1999-00 did not include 486 type computer, whereas previous years did..
[2] Data for 2000 represents school-based only; school and district persons counted in previous years
[3] Results were presented in a different format
[4] Data for 3 previous years represented both school and administration buildings.

Technology Training Evaluation

In this fourth year of the Louisiana Technology Initiative, professional development was the major emphasis, not only for teachers, but for all personnel involved in education in the state. Toward this end, LCET developed training sessions in the areas of technology literacy, integration of technology into the curriculum, application of software and skills training, technical support training, administrative training issues, and assistive technology training. Districts were encouraged and aided to do likewise. Public and non-public school teachers, school and district administrators, personnel from the Louisiana Department of Education, and university people were all afforded opportunities for technology training and strongly urged to participate.

Four regional Teaching, Learning, and Technology Centers (TLTCs) were established during the 1998-99 school year, and in the 1999-2000 session five more were funded. The nine centers serve as extensions of LCET by providing technology training services to educators in their surrounding parishes. The major emphasis is implementation of the Louisiana INTECH models, though technical and administrative support courses are also offered.

The *Evaluation of Training Form*, also known as the "*Technology Training Evaluation Form*", was designed to provide data on all professional development sessions pertaining to technology in the state. It is on-line at <http://www.lcet.doe.state.la.us/submissions/tech_intro.asp>,

Results

As shown in *Table 2*, **1,343** professional development sessions were presented in Louisiana during the 1999-2000 school year, involving **12,755** participants. Of that total, **10,837** were teachers. Multiple responses were possible because participants completed the forms after every session. The new revised form was not available until January 2000, so any sessions occurring between August 1999 and January 2000 were probably not in this count, even though coordinators were urged to submit data from the earlier sessions. The probability is that the numbers above could have been higher and even more impressive in actuality.

Sessions were first registered by the presenter and assigned passwords. Participants used the password to access the on-line evaluation form and anonymously complete it at the end of the session.

Immediate feedback for each session is provided on the Technology Coordinator's Web Page <http://www.lcet.doe.state.la.us/submissions/tech/index.asp> for the district in which the session occurred. On this page, District Technology Coordinators can find statistical results for each session, as well as Overall Statistics of the District Training Evaluations and Overall Grade for Training Sessions in the Districts.

Data from all sessions that occurred in the state between August 15, 1999 and August 11, 2000 were compiled for this report. This gives a global view of the quality and impact of the professional development activities taking place in the state during the 1999-2000 school year, as well as the effects of that training in classrooms. It is important to note that these data do not show unique counts of participants in each category, but instead show how many participated in the sessions. It was possible, and indeed probable, that some individuals participated in many sessions. Data are presented three ways: All Participants, Public School Teachers, and Non-Public School Teachers. Data were compiled for the following categories.:

- Number and Type of Participants
- Training for University Credit or Non-Credit
- Type of Training
- Provider of Training
- Future Training Requested
- Overall Evaluation
- Subject Areas Taught by Participants
- Level of Expertise of Participants
- Special Education Participants

Table 2 - *Professional Development for Louisiana Educators*, below shows the results for all staff development in the state, broken down by types of participant. These data show that **497** participants received university credit for the sessions attended (12,258 for non-credit) and **7,898** participated in sessions provided by Districts At the Regional TLT Centers, **2222** participants were trained and **315** participated in the 56 hour INTECH sessions at the Louisiana Center for Educational Technology.

Language Arts teachers represented about half of the participants (**6,617)** with Mathematics teachers representing **5,531, 5,107** representing Science and **4,949** of the attendees representing Social Studies.   Multiple responses account for the overlaps.

Participants were asked to gauge their Level of Technology Expertise - beginner, intermediate, advanced or instructor. Since this question was also on the ***School Technology Survey***, it is interesting to see the comparison of responses on the two forms in the chart below.   Some differences can be accounted for by the addition of an extra category, Non-User, on the Technology Survey. However, very similar

	Comparison of Levels of Training	
	School Technology Survey	**Evaluation of Training Form**
Non-User	06.7%	

Beginner	33.4%	36.6%
Intermediate	43.0%	49.1%
Advanced	12.3%	10.5%
Instructor	03.9%	03.8%

results occurred. This leads to the conclusion that this year's results are on-target, even though they show a drop from last year's results on the **School Technology Survey.** (See **Table 1**)

For five questions in the "Program Presentation" and "Program Effectiveness" sections of the form, respondents were asked to assign one of these grades: A= Excellent, B=Good, C=Satisfactory, D=Unsatisfactory, F=Did not meet expectations. The following values were assigned to the grades:

$$A = 5 \quad B = 4 \quad C = 3 \quad D = 2 \quad F = 1$$

Mean scores for all participants for all five questions were above **4.60**, indicating that sessions were considered very satisfactory. The mean score for "Overall effectiveness of training session" was **4.64.** Obviously, the technology training sessions in the state are accomplishing their goals.

Of the twelve areas of professional development listed, participants showed interest in further sessions in all of them, with Integration of Technology receiving the most requests (**5,351**). Seven of the areas each received over 4000 votes. It is evident that educators are developing a deep interest in learning more about the educational applications of technology.

Table 3 - *Professional Development for Public School and Non-Public School Teachers.*, provides the results for teachers only. Results reveal different areas of focus for the two groups. For public school teachers, approximately slightly more than one-third (38%) participated in Application Software/Skills Training, and one-third (33%) in Integration of Technology. The third largest category was LA INTECH with 20%. LA INTECH had the largest participation for non-public school teachers (40%) with Application Software/Skills Training (36%) and Integration of Technology (17%) next. The *Overall Ratings* were very similar and both very favorable.

Since the instrument was completely redesigned, few comparisons with previous years can be made. As a whole the survey results reveal a very favorable impact of professional development on all levels of the educational infrastructure in the state.

Table 2
Professional Development for Louisiana Educators
Data from Evaluation of Training Form

	Teachers	School Admin.	Central Office Admin.	Sup-port Staff	Dept. of Educ.	Univer-sity	Parapro-fessionals	Parents	Total
Number of Participants	10,837	367	143	607	153	41	445	26	**12,755**
Training For									
• University Credit	462	17	6	7	0	1	3	1	**497**
• Non-Credit	10,375	350	147	600	279	40	442	25	**12,258**
Type of Training									
• LA INTECH	2,251	50	36	60	18	15	11	1	**2,442**
• Integration of Technology	3,560	64	26	88	14	21	91	4	**3,868**
• Application Software/ Skills Training	4,115	183	79	375	246	5	279	17	**5,300**
• Technical Support Training	254	14	4	15	0	0	21	1	**309**
• Administrative Training/ Issues	136	28	3	28	1	0	6	1	**203**
• Intro. To Basic Computer Literacy	520	28	5	41	0	0	37	2	**633**
Training Requested									
• Technology Integration	4,818	144	50	143	54	23	115	4	**5,351**
• Accountability	1,595	113	35	74	47	13	68	0	**1,942**
• Standards-Based Lessons	4,590	108	25	133	30	13	153	3	**5,055**
• Word Processing	2,593	106	25	248	85	8	182	7	**3,254**
• Data Base/Spreadsheet	2,362	123	51	229	122	21	106	9	**3,023**
• Troubleshooting	3,721	128	53	232	62	19	182	14	**4,411**
• Networking	2,615	109	49	179	53	13	141	4	**3,163**
• Internet	4,393	135	44	235	69	14	215	3	**5,108**
• Presentation Software	3,635	103	37	153	64	22	130	4	**4,148**
• Classroom Management	3,769	82	18	64	13	18	124	0	**4,088**
• One Computer Classroom	3,941	87	33	53	15	7	98	0	**4,234**
• Other	314	16	7	26	13	2	26	1	**405**

Overall Ratings for Professional Development Sessions
A = Excellent   B = Good   C = Satisfactory   D = Unsatisfactory   F = Did not meet expectations
A = 5   B = 4   C = 3   D = 2   F = 1

	Mean Scores
1. Information was presented in an organized manner.	4.71
2. Handouts were useful.	4.72
3. Training materials were appropriate to participants' level of experience.	4.60
4. Trainer presented information in well-organized manner.	4.73
5. Overall effectiveness of training session.	4.64

Number of Training Sessions in the State   1,343

Number of Hours of Training in the State   15,609

Table 3
Professional Development for Public School and Non-Public School Teachers
Data from Evaluation of Training Form

	Public School Teachers		Non-Public School Teachers	
Number of Participants	10,3187	**94%**	650	**6%**
Training For				
• University Credit	401	**4%**	61	**9%**
• Non-Credit	9,786	**96%**	589	**91%**
Type of Training				
• LA INTECH	2,018	**20%**	233	**37%**
• Integration of Technology	3,403	**33%**	157	**24%**
• Application Software/ • Skills Training	3,894	**39%**	222	**34%**
• Technical Support Training	239	**2%**	15	**2%**
• Administrative Training/ Issues	133	**1%**	3	**0%**
• Intro. To Basic Computer Literacy	500	**5%**	20	**3%**

Future Professional Development Requested	Public Teachers	Non-Public Teachers	ALL Teachers
• Technology Integration	4,531	311	4,818
• Accountability	1,517	88	1,592
• Standards-Based Lessons	4,382	236	4,590
• Word Processing	2,423	180	2,593
• Data Base/Spreadsheet	2,187	178	2,362
• Troubleshooting	3,468	267	3,721
• Networking	2,437	180	2,615
• Internet	4,134	266	4,393
• Presentation Software	3,610	236	3,625
• Classroom Management	3,521	256	3,769
• One Computer Classroom	3,665	264	3,941
• Other	280	34	405

Overall Ratings for Professional Development Sessions
A = Excellent   B = Good   C = Satisfactory   D = Unsatisfactory   F = Did not meet expectations

	Mean Scores Public	Mean Scores Non-Public
1. Information was presented in an organized manner.	**4.72**	**4.64**
2. Handouts were useful.	**4.72**	**4.66**
3. Training materials were appropriate to participants' level of experience.	**4.61**	**4.51**
4. Trainer presented information in well-organized manner.	**4.73**	**4.66**
5. Overall effectiveness of training session.	**4.64**	**4.68**

End of Year Reports

Louisiana has 64 public parish school systems, two city school systems, and six state schools, including schools for the deaf, visually impaired, and for children with physical disabilities among others. Of the 71 that received funding this year, all 66 districts and two of the state schools completed an *End of Year Report* (EOY) which was due by August 31, 2000. The non-public schools include seven Catholic dioceses, other parochial schools, private and independent schools, alternative schools, and charter schools. Of those that received funding, all seven dioceses and 45? non-public schools completed the *End of Year Report.*

A new category this year was for consortia that were recipients of Professional Development Grants. *End of Year Reports* were completed by technology coordinators from the districts serving as fiscal agent for each consortia, in three categories: Consortia Continuation Grants, Consortia Implementation Grants, which both funded regional Teaching, Learning, and Technology Centers (TLTCs), and District/Consortia Professional Development Grants, which districts used for further technology integration and training. Twenty-one of the 23 consortia completed the reports.

All *End of Year Reports* were submitted on-line. Copies of these forms are found in *Appendix I*, *Appendix J,* and *Appendix K*. The forms requested demographic information about the district, school or consortia, the amount of the Classroom-Based Technology Fund and Technology Literacy Challenge Fund awards, the latter only for districts, state schools, and professional development consortia. The next section listed the six objectives of the State Technology Plan and requested that technology coordinators submit local goals under the appropriate state goal each fulfilled. For each goal, the measure, method of data collection, source of data, baseline status date, and baseline results, current results as of August 31, 2000, and anticipated results as of September 2002, were submitted.

The next section of the EOY solicited explanations of how the local educational technology goals aligned with the state's technology plan and with their own parish learning goals, the primary uses of the award, grade levels and content areas impacted. Section V. required an explanation of how the use of the awards and partnerships with businesses, libraries, and private entities helped them to reach their goals.

The EOY also solicited responses referencing the National Technology Goals/Pillars with four Likert-type rubrics (scale = 1 to 5). Each rubric indicated progress toward the goals as a result of all funding sources (federal, state and local). See *Appendix N* for *Table 5- Means of Districts/Schools Fulfilling the Four National Pillars*. The final section requested a description of the process for ongoing evaluation of technology integration and its effect on student achievement, progress toward meeting National and State Goals, and additional comments. Consortia were not required to complete this section,

There were a large number of mismatches between goals, measures and results in the district reports. Measures often did not pertain to the goals, and the results section often provided a third concept which was not related to either the goal or measure. It was therefore necessary to consider the three entities as one and report mostly the results that were obtained.

Also, goals did not always match the Objective category in which they were placed, with the result that all six objectives of the state plan had goals that could or should have been placed in different categories.

Demographics

Public school districts were awarded both CBTF and TLCF funds while dioceses and non-public school received only the state-funded CBTF moneys. Because many non-public schools did not apply for grants, the funds dedicated to those schools were reallocated and added as Carryover Funds to districts and schools. The total funds awarded from both funds was **$27,149,355.32**. Details are in **Table 4** below.

Table 4 - Total Technology Initiative Funds Awarded				
	CBTF	**TLCF**	**TOTAL CBTF/TLCF**	**TOTAL All Grants**
Technology Implementation Grants				
Districts	$14,045,733.00	$5,830,610.00	$19,876,343.00	
State Schools	46,808.00	6,766.00	53,574.00	
Total Districts & State Schools	14,139,349.00	5,844,142.00	19,983,491.00	
Dioceses	1,736,103.10			
Non-Public Schools	1,231,928.56			
Total Non-Public Schools	2,968,031.66		2,968,031.66	
TOTAL Technology Implementation				**$22,951,735.32**
Professional Development Grants				
Technology Continuation		$ 654,628.00		
Technology Implementation		903,974.00		
District/Consortia Professional Development Grants		2,639,018.00		
TOTAL Professional Development		4,197,620.00		**4,197,620.00**
TOTAL FUNDS AWARDED	**$17,107,593.32**	**$10,041,762.00**	**$27,149,355.32**	**$27,149,355.32**

EOY Results for Public and Non-Public Schools

Alignment with Louisiana Technology Plan

The format of the following section provides the objective and district or school responses in a qualitative context analysis, which identifies major themes in the information and data, provided by the technology coordinators.

The State Technology Goal.   All educators and learners will have access to technologies that are effective in improving student achievement.

Objective 1: Technology-rich Learning Environments [1]

District technology goals focused strongly on providing access to technologies that are effective in improving student achievement and decreasing student to computer ratios. To meet these goals, schools and districts placed multimedia computers in classrooms, connected them to the Internet, and provided peripherals such as appropriate software, Smartboards, presentation systems, and digital cameras. Internet access was improved through installation of wide area networks (WANs), local area networks (LANs), Intranets, and T-1 lines. The improved infrastructures were to enhance student learning and increase scores on statewide tests.

Some goals provided for professional development, especially through INTECH training, in the belief that technology will drive change in teaching and learning. The establishment of training labs in each consortia district was one means of accomplishing these goals.

Objective 2: Professional Development

The understanding of technology and its integration into the curriculum is an underlying belief of the state technology plan. Districts and non-public schools met this directive by providing staff development in the integration of technology into curricular activities, mostly through INTECH classes, as well as sessions on basic computer skills, educational software, the Internet, and addressing technical problems.

Training was conducted in districts and also at regional training centers and the TLT Centers. Some university courses were offered for credit, and some sessions were designed for technical support personnel and administrators. One district provided stipends to teachers attending training sessions, and another paid substitutes and travel with the funds

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[1]   Not all stragegies and objectives in the State Technology Plan required responses from schools districts.

Technology coordinators reported that a major percentage of teachers and other personnel participated in professional development activities. The intent was to improve teacher competence in the use and integration of technology to increase student achievement. Accordingly, some goals aimed for teachers to implement new strategies, demonstrate proficiencies, meet educational technology foundation standards, and develop technology-connected lessons. Districts planned for students to increase achievement in mathematics, geography, social studies, and other content areas, as well as meet minimal competencies for each grade level.

One district was collaborating with the local university to restructure university methodology and pedagogy classes and increase the number of pre-service educators who are well-versed in integration of technology into curriculum.

Funds were used to place technology in classrooms, purchase computer-based training materials, and establish regional training facilities.

Anticipated results by the year 2002 were to have 80% to 100% of teachers trained to integrate technology into the curriculum.

Objective 3: Integration of Technology and Learning

The goals of schools striving to merge technology into their current local curricula centered on the improvement of teacher competence and student achievement. Districts hoped that teachers would routinely integrate technology into instructional activities, utilize software and peripherals, and use on-line resources. They aspired to improve standardized test scores in mathematics, language arts, social studies, and other content areas, improving achievement for students identified in the high stakes State Accountability Plan and the pass rate on LEAP tests, though in many instances these goals were not attained. Other efforts included increasing the use of computers and the Internet and developing critical thinkers.

For attaining these goals, districts are requiring technology components in lesson plans and requiring that content standards serve as benchmarks of curriculum development. Technology components were added to teacher observation and evaluation instruments, and distance learning for students and teachers, as well as other we-based resources were provided for enhancing curriculum.

Objective 4: Technology Leadership, Policy and Accountability

Louisiana has been very fortunate to have existing employees who could assume the responsibilities of technology coordinator for districts and schools. Districts are now taking the next step by cultivating leadership within schools and districts for the integration of technology into the curriculum. Some are training technology coordinators, librarians and teacher trainers, and using grant moneys to fund these

positions. These leaders will be expected to monitor the effectiveness of technology use, and are attending workshops to learn how to do so. One district plans to have leaders choose technology policies that promote student achievement.

Acceptable Use and Copyright Policies were developed, adopted and distributed to personnel and students. Districts and schools are assuring that licenses exist for all software in use and Internet filtering is in place in many districts. Furthermore, these legal and ethical issues have been added to technology plans.

To provide optimum learning environments, educators are receiving support and maintenance of equipment. They endeavor to provide infrastructure that ensures equitable access for all students.

Objective 5: Effective Use of Technology Funding and Resources

As schools and districts strive to better integrate technology into classrooms, many have recognized the need and importance of seeking funding from many sources. The agencies mentioned most were LEARN and 8(g) grants for innovative programs. The Professional Development Grants offered to various combinations of districts and non-public schools were prized for the extra moneys they provided for professional development and equipment, and in some cases technology coordinators were hired with shared funds. Other federal funds in the parishes, such as Title I, II, and Special Education provided technology. Every district in the state qualified for E-rate refunds, providing $$ for networking and Internet access.

Partnerships with telecommunication companies, such as Bell South, CenturyTel, Orion, and Compstar provided expertise in planning for technology, training, and equipment maintenance. These proved especially valuable in poor rural parishes, with few businesses or industry available for help.

Objective 6: Public Awareness

Most respondents recognized the need to communicate the progress of their technology initiatives to stakeholders. As a result, public awareness of the implementation of technology in classroom was promoted through press coverage, presentations to school boards, and school and district Web sites. Teachers and students in some schools developed materials in print, video, and electronic formats to inform the public of improved student performance through the use of technology.

Hardware was installed in one school through NetDay activities. Technology training for citizens and supportive businesses provided a way for educators to return something to the community. A few districts chose to motivate teachers and students by enhancing lessons with technology and standards-based instruction.

State Technology Plan and Subgrantee Learning Goals

As reported elsewhere in this report, 100 percent of the state's districts have developed technology plans, and a large percent were reviewed and revised during the 1999-2000 school year. Approximately 50 of them aligned goals in these plans directly to the State Technology Plan. They focused on creating learning environments rich in technology and access to training for improved teaching and learning. As student achievement is the ultimate measure of success, goals for improving student achievement, increased accountability, and meeting state standards were included in district plans as a means of accomplishing state goals.

For accomplishing district educational goals, districts planned to improve academic achievement of all students through the effective use of technology and adequate staff development to enhance teacher effectiveness and ensure technology integration. Some grants targeted content areas, especially mathematics, reading and language arts, and emphasized curriculum based on state content standards.
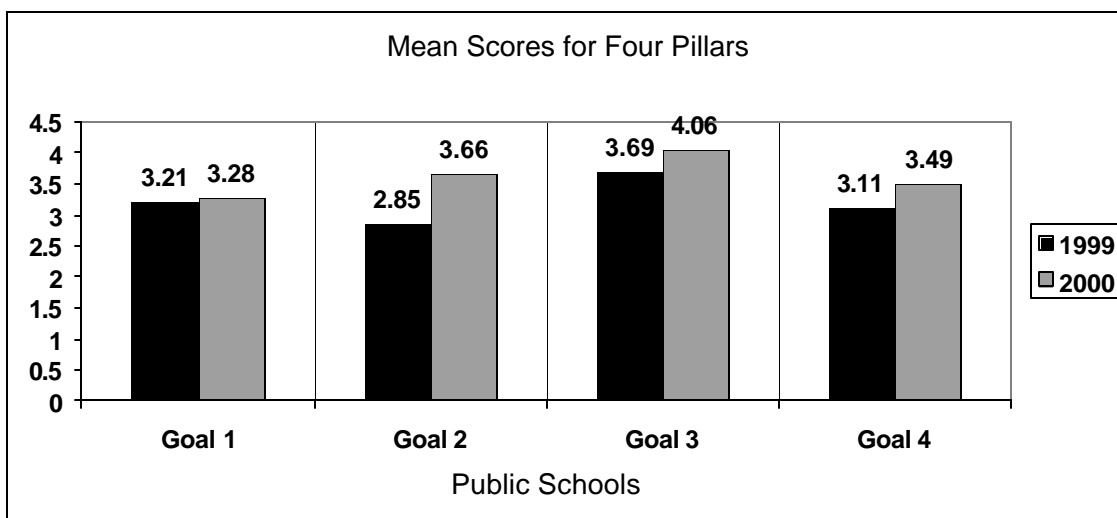
Partnerships

The partnership with the state for receiving CBTF/TLTC funds was the most mentioned and most beneficial. Rural parishes depend heavily on these grants, due to the scarcity of local funding. Districts indicated an effort to work with businesses, libraries, museums and private grant agencies that expressed interest in helping schools incorporate technology into curricula. Agencies noted in particular were Rapides Foundation, Project Hyperleap, Workforce Investment and Computers for Louisiana's Kids.

Collaborations with state and federal grants such as Title I, Special Education, and 8(g), is proving successful and university partners and the Louisiana Public Broadcasting system provide courses for educators. The TangiTech project is combining ideas and expertise from Georgia Tech and Louisiana State Universities to develop training modules for teachers.

Four National Pillars

Each of the technology coordinators was asked to indicate the progress made toward fulfilling the Four National Pillars (Goals) for technology by marking a five-point scale. Ranges were described, and were different for each goal. Means of the scores for each pillar were compiled and reported in *Table 5*. (See *Appendix N–*

Four National Pillars. – Mean Scores). The graph below shows mean scores for both 1999 and 2000, allowing comparisons

Mean Scores for Four Pillars

	Goal 1	Goal 2	Goal 3	Goal 4
1999	3.21	2.85	3.69	3.11
2000	3.28	3.66	4.06	3.49

Public Schools

For Pillar One, the mean on the five-point scale was **3.28**, indicating that approximately 58%, of the *teachers* were participating in on-going training and receiving support to help students learn through computers and through the information superhighway. The mean score has increased from last year's mean.

The mean value for Pillar Two, "All teachers and students will have modern multi-media computers in their classrooms," was **3.66,** which corresponds to a *student to computer ratio* of approximately **11:1**, as seen by the technology coordinators. Compared to last year's report, the ratios are decreasing.

For Pillar Three, "Every classroom will be connected to the information superhighway," responses indicated that the mean value was **4.06** and corresponds to approximately 75% of the classrooms connected to the information superhighway. The mean score has increased from last year's mean.
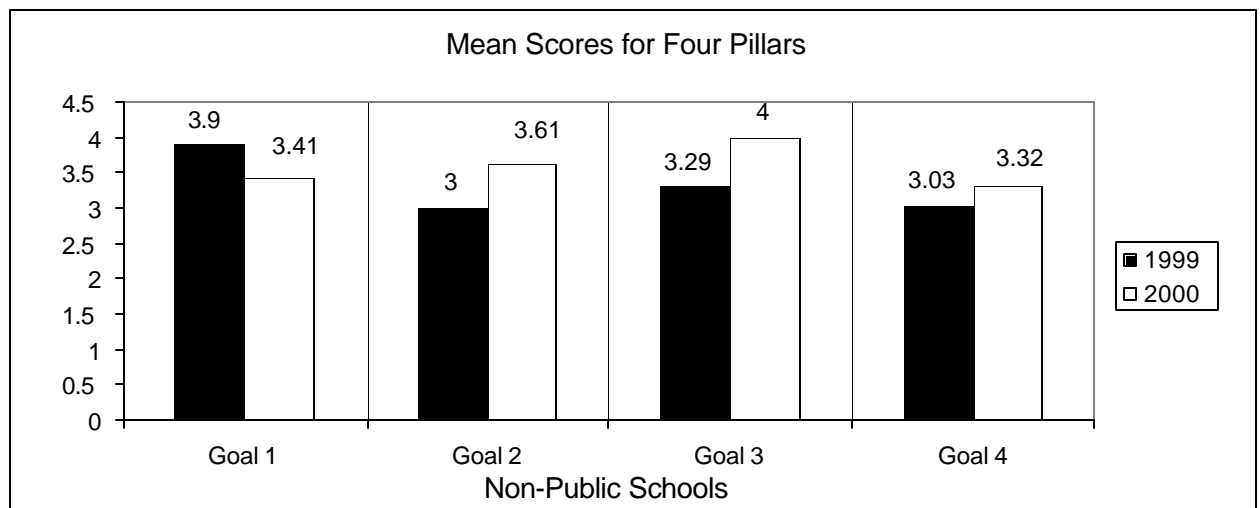
In response to Pillar Four, "Effective and engaging software and on-line learning resources will be an integral part of every school's curriculum", the mean response was **3.49.** This indicates that approximately 62% of the *schools* in the state have effective software and on-line resources. The mean score has increased from last year's mean of 3.11.

Forty-seven non-public schools and seven Dioceses responded to the same four scales. The means were calculated and are also presented in *Table 5*, which can be found in *Appendix N –Four National Pillars – Mean Scores.*.

Non-public schools believed that about 61% of their teachers have the training and support needed to help students learn through technology, which decreased from 73% last year. The student to computer ratios were almost the same both groups, about

11:1. Public and nonpublic schools both reported that 75% of the classrooms are connected to the information superhighway. Finally, about 62% of the public schools and 59% of the non-publics believed that they had effective and engaging software and on-line learning resources as an integral part of every school's curriculum.

The persons reporting for the non-public schools completed the same four-point rubrics for the

Mean Scores for Four Pillars

	Goal 1	Goal 2	Goal 3	Goal 4
1999	3.9	3	3.29	3.03
2000	3.41	3.61	4	3.32

Non-Public Schools

Evaluation

District plans are showing an increased focus on student achievement this year as the ultimate measure of the success of integrating technology into teaching and learning. Almost one fourth of them will use student test scores from the IOWA, CAT, Stanford, LEAP, and GEE tests to measure improvement, and national goals and state standards have been factored into evaluations. Some will compare student test data of teachers with extensive technology training to those with less.

Teachers were evaluated on the use of technology in the classroom and were exposed to continuous monitoring and evaluation of the effective use of technology and alignment with technology plans. Evaluation of individual training sessions, teacher and student self-assessments, pre-and post-surveys, lesson plans, observation checklists, portfolios, and final evaluations are all being used to develop summative data.

Yearly reviews of technology plans were instigated by most districts to determine the effectiveness of technology integration and student achievement. Districts/schools know that the impact of technology on learning is a continuous process and therefore curricula and instruction must also improve.

Comments

Very few responded to this item, however the ones that did were emphatic in declaring the CBTF/TLCF grants to be the most important contributor for implementing district technology plans and preparing educators for current technology and educational trends. Many rural districts expressed a need for more funds to help them "catch up" with more prosperous districts. Continued state and federal support for technology staff development should be among the highest funding priorities.

End of Year Results for Professional Development Grants

As the title implies, most goals for these grants, pertained to Objectives 2 and 3 Professional Development and Integration of Technology and Learning, respectively. Some were designed to focus on developing technology leadership and efficient use of resources by combining the efforts and resources of several parishes and non-public schools and dioceses. To this end, they capitalized on personnel, facilities, and funds from all entities.

Objective 1: Technology-rich Learning Environments [2]

District/Consortia grantees submitted most of the goals in this category. Placing multimedia computers connected to the Internet in classrooms and providing access to technologies that are effective in improving student achievement were the most often mentioned goals. Improving the student to computer ratio was also mentioned. Some consortia were establishing teacher training labs and offering INTECH, training on strategies for integrating software programs into curriculum, and the use of computer peripherals.

Objective 2: Professional Development

The goal of over one-third of the consortia was to provide LA INTECH training, mostly at TLT Centers. They also planned to offer staff development that included technology and its integration into the curriculum, basic computer skills, technical support training, and training administrators how to evaluate technology immersion and the development of computer literacy skills.

Though contained in the basic philosophy of INTECH, some included specific goals for teachers to develop technology-connected lesson plans and implement new strategies for integrating technology which improve student achievement. Increasing professional development opportunities, training teacher trainers, improving student achievement,

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[2]   Not all stragegies and objectives in the State Technology Plan required responses from schools districts.

and enhancing the quality of education were often mentioned. Providing basic computer skills training for educators was proposed by some of the regional centers.

A significant number of the measures and results did not match goals in this category, with many having different concepts in all three, making it difficult to decide if goals had been accomplished. Nevertheless, most consortia reported that goals had been achieved, as evidenced by large numbers of sessions and participants, as well as installment of several regional training laboratories through consortia grant funds. Several TLT Centers used pre- and post- measures of the Louisiana INTECH Course Assessment Form and some used the *Evaluation of Training* form. Effect at the classroom level was accomplished by redelivery and "train the trainer" sessions, collection of participants' lesson plans and, in many, instances posting them on web sites.

Anticipated results by the year 2002 were to have 50% to 100% of teachers trained, mainly through LA INTECH, and submitting technology-connected lesson plans.

Objective 3: Integration of Technology and Learning

Grantees receiving Implementation and District/Consortia grants focused strongly on improving student achievement through the integration of technology, while all three felt they needed to improve teacher competence and train educators in the application of technology in instruction.

Development and utilization of technology-connected lesson plans measured integration of technology and learning. Student LEAP test and standardized test scores as well as surveys of student technology use and computer literacy skills served as measures for student improvement.

As a result of the funded activities, staff development activities were available to educators in all districts and regions of the state, to both public and non-public educators. Impressive gains in student achievement measures were also cited.

Future progress in anticipated in the numbers of educators trained, technology-integrated lessons in use, and student achievement.

Objective 4: Technology Leadership, Policy and Accountability

The goals of many consortia included the cultivation of leadership within schools and districts for the integration of technology into curricula by training teacher trainers and instituting the redelivery phase of the LA INTECH plan. Some planned to involve administrators in LA INTECH courses and to train them to evaluate technology integration in classrooms. Only one planned to develop and implement policies concerning ethical and legal issues, but this is understandably best handled at the district level.

The newer consortia formed this year reported few goals for this objective, but the four receiving continuation funds appear to be expanding beyond the basic literacy and technology integration training issues to the administrative level issues in this area.

Most consortia relied on increased numbers or percentages of educators trained as a measure of their goals. Anticipated results typically focused on increased numbers of educators and administrators trained.

Objective 5: Effective Use of Technology Funding and Resources

Professional development grants provided a meaningful and efficient means of providing training to state educators. By pooling resources to build and equip, and staff training centers, districts were able to increase professional development opportunities. Several collaborated with universities, so were able to offer university credit. Collaboration between parishes, with Catholic dioceses, and between TLTC Consortia and District/Consortia groups apparently compounded the impact of funding on changing teaching and learning in the state.

The sharing of resources and talent has proved to be extremely beneficial in this beginning stage of the incorporation of technology into education, when so many must be trained. TLT Centers were able to help LCET introduce initiatives such as the INCLASS project and the Gale Group Database Rollout. Many participants received college credit for the INTECH courses. Consortia anticipated forming more partnerships and collaborations in the future.

Objective 6: Public Awareness

For technology initiatives to continue and progress, it is essential to communicate their success to important stakeholders. Most consortia representatives felt that they needed to promote public awareness of the implementation of technology in teacher preparation and classroom instruction. Press coverage and presentations to school boards, PTOs and community groups, were considered appropriate for this purpose. Some involved stakeholders in the planning for and the use of technology. One district group shared the positive results of a checklist of students' technology skills. Two of the consortia established web sites and used them as sources of information, as well as publicity.

Very few of the consortia had goals for this objective; the Technology Implementation group had none. Results were nevertheless positive and impressive.

State Technology Plan and Subgrantee Learning Goals

The importance of aligning consortia's educational technology goals to the State Technology Plan and/or national goals is evident, in as much as 91% of them said they did so. IN TECH was used to model the incorporation of state standards and benchmarks. The direct influence of professional development on student achievement was recognized with goals of improving ITBS and LEAP scores, increasing accountability at all levels, and providing opportunities for educators to use technologies that help students meet standards.

Most consortia technology goals were designed to support learning goals of the districts represented in the groups, especially that of improving the academic achievement of all students through the effective use of technology. Targeting standards-based curriculum through professional development offered a means of accomplishing that end. Their use of funds is included in **Table 4** above.

Partnerships

Collaboration with other districts and non-public schools was a requirement for awarding of the Professional Development Grants, so a majority considered the use of the TLCF funds for development of the TLT Centers to be their most significant accomplishment. Almost one third said they had worked collaboratively with partners to provide staff development activities. University partners provided courses for credit, and businesses, libraries, museums, contributed talent and resources.

Four consortia established steering committees or advisory councils made up of LEA, industry, and school board representatives who advised on goals, objectives, support, funding and evaluation. Cooperation with Regional Educational Service Centers, a Tech Prep Consortium, RSI, Challenge grant projects, and involvement in the INCLASS and Gale Group initiatives with LCET all helped to prepare educators for the integration of technology into curricula.

Evaluation

The State Accountability Plan and the expectations held for student achievement in all schools in the state is well known by districts. Almost half of the consortia chose to gauge their success with student scores from the IOWA, CAT, and Stanford standardized tests, and the LEAP and GEE scores. Many planned to monitor and evaluate teachers on their use of technology in the classroom. Measures such as teacher and student surveys, observations checklists, and portfolios were also used. Some districts are training administrators on technology integration evaluation and are tracking the progress of INTECH participants.

On-going and/or yearly evaluations were used to determine the effectiveness of technology integration and to find out which strategies work. Only four mentioned the use of the on-line *Evaluation of Training* form provided by LCET.

<u>Additional Comments</u>

The TLC Funds were extremely beneficial in preparing educators for current technology and educational trends. Some felt they were the most important contributor to implementation of district technology plans. The funds allowed the training of many additional educators and several feel that continued federal support for staff development should be among the highest funding priorities.

<u>Evaluator's Comments</u>

The allotting of funds for professional development activities beyond the local level has proven to be quite effective in accomplishing the awesome task of introducing technology infused education to all educators in the state at all levels. Through collaboration and sharing, districts and the state were able to present almost twice as many hours of training as in the previous year. Regional centers furnish modern, state of the art training laboratories for educators in nearby parishes, thereby freeing local equipment and infrastructure funds for classroom uses. The report on the **Technology Training Evaluation** shows that **2,222,** or 17%, of the total participants were trained at TLT Centers. The hope that the LA INTECH model will change education in Louisiana is increasingly probable, with the bountiful opportunities for teaching that model now available from multiple entities.

End of Year Report for Louisiana Center for Educational Technology

The Louisiana Center for Educational Technology (LCET) serves as the state leadership group for the Department of Education in its educational technology efforts, to ensure that Louisiana's classrooms are creating a workforce prepared for the demands of the 21st century. Four major areas of the state plan drive Louisiana's technology initiative:
- the development of technology-rich learning environments and a K-12 network;
- professional development opportunities in the use of technologies that help students and teachers meet high standards;
- access to curricular materials and resources that support the use of technology in teaching and learning;
- accountability and evaluation procedures that monitor the effectiveness of technology use.

The Director of the Louisiana Center for Educational Technology and his staff were asked to identify goals, objectives and/or activities, and actual results that were accomplished by the staff for these as well as all strategies in the State Plan. The major accomplishments identified are reported. A complete description of the state

technology initiatives can be found on the Department of Education's web site <http://www.doe.state.la.us>.

Objective 1: Technology-Rich Learning Environments

Dr. Carol Whelan, Chris O' Neal and his staff have actively recruited and received funding for technology infrastructure from state and federal sources such as Legislative grants, TLCF grants, and E-rate rebates. Districts and schools were assisted with short- and long-term planning for technology and were given support during the grant application process. The Center hires technical staff to provide, to support, and to manage the development of the Louisiana network. Cooperative efforts between LCET and the Governor's office, LASIP, LACUE, Louisiana Challenge Grant Project, and higher education have helped to provide a uniform technical infrastructure and models. Representatives of these other groups were appointed as members of the State Technology Advisory Committee.

The **Statewide Distance Learning Network (SDLN)** project received continued funding from the BESE board to provide students and teachers the opportunity to access needed courses and appropriate curriculum and enrichment programs utilizing telecommunications systems. Students are provided access to BESE-approved core curriculum courses required for University admission, Louisiana Tuition Assistance Plan, TOPS, and Advanced Placement (AP) courses. The current modes of distance education include telelearning, satellite, and compressed videoconferencing. In addition, the *Louisiana Virtual Classroom* (LVC) pilot project of web-based courses was designed and will begin in the fall of 2000.. Eleven teachers and one university professor will deliver on-line courses including Latin, Spanish I, II, Algebra I, Environmental Issues, Computer Science, World History, English IV, and Physics. Full details regarding the *Louisiana Virtual Classroom* can be found at <http://www.lcet.doe.state.la.us/doe/asps/home.asp?I=LCET/distance>.

Objective 2: Professional Development

Louisiana INTECH is an intense, content-rich, hands-on, 56-hour staff development program. *Louisiana INTECH*, an adaptation of the Georgia INTECH model, provides teachers with many examples of effective technology-based strategies that support and enhance curriculum and can serve as a catalyst for fundamental change in overall teaching and learning processes. INTECH teams of teachers learn basic technology skills while focusing on project-based activities that are based upon the Louisiana Content Standards. The K-6 INTECH model was implemented in 1999. The 7-12 INTECH model was developed and piloted during the 1999-2000 fiscal year.

Nine cycles of INTECH was offered through the Louisiana Center for Educational Technology. Each cycle contained 24 educators for a total of 219 participants. Dr. Adrian Hunt, who developed the program, and her assistant Joanna Deitrich, continue

to develop and edit the lessons and are compiling INTECH Binders for distribution to participants.

In response to a growing need for technology-rich professional development opportunities for LDE personnel and educators statewide, the Louisiana Center of Educational Technology (LCET) coordinated and hosted a series of technology workshops during the year. The planned workshops were responsive to the department's migration to a Windows 95 and Office 97 environment and requests received from district technology coordinators for extended technology training opportunities.

The Professional Development Grants awarded from TLC Funds enabled the establishment of five new *Training, Learning, and Technology Centers*, bringing the total to nine. They serve as extensions of LCET for providing technology training services to educators at regional staff development centers around the state. TLTC facilitators participate in ongoing training at LCET four days a month

In the summer of 2000 LCET offered a variety of workshops that introduced educators to Internet-based resources and other resources that assisted them in developing instructional products for their students, schools, and districts. "Surf 's Up!" Camp was a three-day, technology-driven, project-based professional development opportunity for K-12 teachers. Two sessions were held throughout the summer.

Third annual Teaching, Learning, and Technology Institute was held in July. The goals of the Institute were to integrate teaching and learning, develop leadership skills, and to gain an advance understanding of the role of technology in support of the Louisiana Content Standards.

An exciting series of assistive technology workshops were offered throughout the summer months. Workshops and institutes were designed for all educators interested in meeting the needs of special learners. AT consultants from throughout the state provided instruction in a variety of assistive technology and augmentative communication areas.

Two five week sessions on the Introduction to the Virtual Classroom was offered by the Louisiana Center for Educational Technology. All session activities occurred on-line. This online workshop included five modules that provided an overview of administrative, instructional, technological, and pedagogical issues of the K-12 Virtual Classroom. The modules were presented over the course of a five-week period and were intended to provide both a practical and theoretical base in web-based instruction.

The LCET continued its partnership with the *Louisiana Technology Consortium for Teacher Educators (TCTE)* by including a team of college professors in one *Louisiana INTECH* Institute, becoming a partner in the *The QUEST* Preservice Education project, and encouraging districts and schools to adopt ISTE standards.

Active partnerships with *TLTC, The Quest,* the *STAC* state council, and *LASIP* provided opportunities for advice from business, regional, and university representatives on the design of teacher training activities.

Objective 3: Integration of Technology and Learning

The Louisiana INTECH model developed by LCET provides many examples of effective technology-based strategies that support and enhance curriculum. The Louisiana Content Standards are the basis for all technology-connected lessons can be found on-line DOE web site. All professional development activities offered by DOE and LCET emphasize technology integration into the curriculum to support those standards.

The **Making Connections Project**, a collaborative effort between LCET and the Louisiana Department of Education's Division of Student Standards and Assessment, continued this year to create a "virtual" resource center of lesson plans, web site resources, software and assessment items for state educators.

Through the creation of a "virtual" resource center on the Department's web site, teachers access "a one stop shop" for instructional materials that enhance teaching, learning, and technology opportunities in Louisiana's K-12 schools. The Louisiana Content Standards – Mathematics, English Language Arts, Science, Social Studies, Foreign Languages, and the Arts – are the heart of the project and provide the context in which all resources are selected, presented, and implemented. The initial components of this electronic resource center include model lesson plans, web site resources, software products, and statewide assessment items. For more information, visit <http://www.lcet.doe.state.la.us/conn/>

Objective 4. Technology Leadership, Policy and Accountability

The Department of Education's Division of Student Standards and Assessment and the Louisiana Center for Educational Technology collaborated in the coordination of the **Committee for Advancing Technology Standards (CATS***).* The CATS steering committee directed three major initiatives related to the effective integration of technology in K-12 curriculum: (1) development of K-12 Louisiana Educational Technology Standards for students (2)expansion of the Secondary Computer Education curriculum through the identification and development of standards-based high school technology courses and course descriptions, and (3)development of Standards for Distance Education.

The Teaching, Learning, and Technology Council established last year continues to meet regularly. The mission of the council is to provide support, guidance, and statewide leadership in educational technology. A representative from each Department unit sits on the Council, as well as a technology leader from each region.

Members of the LCET and MIS staffs provide support to the Council. Subcommittees of the council help to address specific goals of the state educational technology plan.

LCET is also working very closely with the *Louisiana: Vision 2020* initiative. This initiative serves "as a challenge to create a newer and better Louisiana and as a guide to economic renewal and diversification." The group is comprised of members from the Louisiana Economic Development Council, the Governor's Office, the Board of Regents, Louisiana Legislature, and other entities all working together to create a more high-tech, competitive workforce in the state.

Ongoing collaboration and dynamic partnerships with a variety of educational entities and leaders further strengthen statewide technology strategies. Of particular note are partnerships with: the Louisiana Systemic Initiative Program (LaSIP), the Louisiana Challenge Program, the Delta Rural Systemic Initiatives, Louisiana Public Broadcasting, the Technology Consortium for Higher Education, regional Teaching, Learning and Technology Centers, all of the state's public and non-public school systems, and other divisions within the Department of Education.

Through the Louisiana Technology Initiative, the Center administered the awarding of CBTF and TLCF funds. Collaboration with the State Educational Technology Planning Committee (SETPC) has advanced the funding for technology projects, and the Universal Access Committee helped oversee the E-Rate application process.

The LCET has worked with schools and districts in developing their technology professional development plans. The Center provided numerous workshops to Department staff to address the need for enhanced technology leadership. It continues to research and present new possibilities for answering the needs of students with disabilities.

LCET has offered recommendations to the State Technology Advisory Committee and the BESE board on initiatives and policies that promote technology as integral to the teaching and learning process. The CATS committee continued to coordinate and oversee the effective integration of technology in K-12 curriculum.

In the spring of 2000 an evaluation team from LCET gave workshops in every region of the state to demonstrate how to complete the online evaluations such as the Louisiana School and District Survey, the Professional Development Evaluation Form and the End of the Year Report. In January of 2000 Rachel Sellers was hired by LCET as a full time evaluation coordinator. Her main job responsibility was to address any questions that districts and school may have regarding the evaluation process.

Objective 5: Effective Use of Technology Funding and Resources

To provide quality educational resources for educators, Louisiana became a state partner with *ThinkQuest*, a national organization aimed at engaging students worldwide in its programs as participants learn to assimilate, organize, and share their knowledge with others around the world. Another partnership that was formed this year was *Marco Polo*. This initiative, provides access to daily classroom planning materials, brief and extended lesson plans, reviewed and expert-approved links to related high-quality sites, and powerful search engines, all provided by some of the most well-respected educational content organizations in the country

The E-Rate is the *Universal Service Fund* initiative which discounts to schools and libraries for telecommunications costs. LCET-sponsored workshops, video-conferences, and phone conferences have assisted schools and systems in Louisiana in earning savings of over **$65 million in the last two years** of the program.

Through a partnership with the nonprofit Louisiana Corporate Recycling Council (LCRC), the Louisiana Department of Education, the Governor's School to Work initiative, various state agencies, and school districts, the *Computers for Louisiana's Kids (CLK*) statewide program was created. The program, coordinated by the LCRC, works with school districts and prisons to implement computer training, repair, and recycling programs designed to provide students and inmates with marketable job skills. As part of this program, donated computers are tested and repaired, or salvaged for recyclable materials. Since August 1999, **over 2000 computers** have been placed in classrooms (1500 refurbished by CLK students and over 500 not requiring refurbishing at all

The Director and his staff have also worked with the state and school systems to look at funding issues more globally and to try to consolidate plans for spending. When applying for grants, applicants were required to include a list of their *Community and Business Partnerships*, with a clear explanation of their roles and contributions in the forms of financial support, equipment, personnel, an/or other resources. The involvement of state-approved nonpublic schools and systems had to be explained, and had to describe how they would continue to involve these groups. The applicants' *Teaching, Learning, and Technology Council* members had to identify.

Grants to districts and schools also were a cost-effective means of reducing disparities for the state, because applicants were required to target children living in poverty specifically and/or reach out to under served groups. The Department applied for and received a $**10,592,272** Technology Literacy Challenge Grant for the 2000-2001 school year which was made available to districts and schools through an application procedure.

A new K-12 Online Database was implemented this year which provides public and non-public schools in the state access to high-quality informational resources via the Internet. The educational community has the advantage of using a collection of

subscription based products from the GALE Group, and World Book, Inc. funded by State Classroom Based Technology Grant monies. Reference resources included in the Gale Group package are Student Resource Center Gold, Junior Reference Center; InfoTrac Student K-13; InfoTrac Junior Edition, InfoTrac Kid's Edition; and General Reference Center Gold. World Book, Inc. provides an online encyclopedia including the brand new "Global World Book Online Encyclopedia Edition." World Book's reference resources are supported by Behind the Headlines articles, Calendar-based features, and the "Learning Zone" of extra teacher- and
student-related resources.

The LCET has on-going communications with all schools and districts, all committees and organizations in the state as well as regional and national groups involved with educational technology. They have communicated funding opportunities via email, their web page, and videoconferences.

Objective 6. Public Awareness

The Video Tape entitled *Technology In the Classroom, K-3 Reading and Math Initiative.- Video Progress Reports* was produced as part of the 1997-*98 Evaluation of the Louisiana Technology Initiative* and shared extensively to develop awareness of "best practices" that can be used as models. In February 1999, an on-line submissable *Mid-Year Technology Initiatives Report* was developed for collecting pertinent data needed for securing renewal of state funding. Results were posted on-line, along with all submitted *Applications for Inclusion in the Video Taping.* Qualitative data was also collected. Solicitations of teacher and student quotes about educational experiences, use of the Internet, increased access to computers, professional development experiences, and interesting classroom projects provided a wealth of "real life" data that was available to the public on the LCET web site.

Business people, higher education representatives, and telecommunications representatives have served on the State Technology Advisory Committee. LCET's web page and workshops as well as state meetings and have provided avenues for exchanging educational technology information. Louisiana Public Broadcasting (LPB) system representatives serve on the STAC and has helped with the distance learning component. LCET and LPB have collaborated in providing announcements and workshops.

SUMMARY

The Louisiana Technology Initiative began in 1987 with the use of funds from the Louisiana Educational Quality Support Fund (LEQSF), commonly called the 8(g) fund. In the 13 years since then, additional funds were allocated by the state and more were received from the federal government to continue the purchase and implementation of

technology in schools. In 1997 the state legislature created the Classroom Based Technology Fund (CBTF) with a $38.2 million allocation. In following years allocations from that fund were $24,150,000 in 1998 and $14,037,250 in 1999. From the federal government, Louisiana received a $5.3 million allocation from the Technology Literacy Challenge Fund (TLCF) in 1997. Additional allocations of $10,272,800 in 1998 and $10,592,272 for the 1999-2000 school year were received.

The Louisiana Center for Educational Technology (LCET) was created within the Louisiana Department of Education to administer the funds and carry out the mandates of the granting agencies. Louisiana continues its commitment to improve education through the integration of technology and learning through the awarding of these grant moneys to continue efforts to carry out the State Educational Technology Goal: All educators and learners will have access to technologies that are effective in improving student achievement.

In concert with the state technology goal, the four national goals also serve as a driving force in the development of state, district, local and school plans. The federal goals are: 1) All teachers will have training and support they need to help all students learn through computers and through the information superhighway; 2) All teachers and students will have modern computers in the classroom; 3) Every classroom will be connected to the information superhighway; and 4) Effective and engaging software and on-line resources will be an integral part of every school curriculum. These goals provided direction for schools and districts in the development of their proposals, as well as the backbone of the evaluation instruments used to collect data on the accomplishment of applicants' goals.

Four new on-line data collection instruments were designed this year to better accommodate the needs of the state and federal granting agencies, and to provide immediate feedback to participants. For all instruments, questions were clustered around state and national goals, to provide indicators of the level of attainment of each. As school systems addressed the six objectives of the State Technology Plan and the four National Goals, it was obvious that their strategies and accomplishments in 1999-2000 were guided by these goals.

The availability and extent of the use of technology in state schools is always important to stakeholders. The Louisiana District Technology Survey and the Louisiana School Technology Survey collected data on these fronts. In June 2000, the student to computer ratio for public schools was 5.5:1, when considering all types of computers. The state has reduced the ratio from 8:1 in 1997, and brought it very close to the National goal of 5 students to each computer. For the non-public schools the ratio was 6.3:1. When only high-end computers are considered, the ratio is 8.2:1 for public and 8.5:1 for non-public schools. The state has made remarkable progress in this area, decreasing the ratio from 48:1 for both public and non-public schools in 1997.

The percentage of computers with Internet access increased in 2000 to 54% from 49% in 1999 for public and to 69% from 61% for non-public schools. Ninety-four percent (94%) of the public schools and 97% of the non-public schools have Internet access, almost doubling the rates in 1997. Internet connections via direct link increased from 76% to 91% for public and from 61% to 77% for non-public schools this year.

The percentage of public school teachers at the Beginner level in using technology has dropped from 41% in 1999 to 33% in 2000; non-public Beginners dropped from 37% to 24%. The Intermediate levels of 41% and 37% respectively showed small gains, but Advanced and Instructor percentage levels dropped in both categories compared to last year. Concerning training and support for teachers, 91% of public and 87% of non-public schools reported having a person responsible for supporting teachers and assisting them with the integration of technology into the curriculum. The same percentages, 91% public and 87% non-public, have a person who helps to maintain and support hardware and software in the schools. Sixty-three percent (63%) of public and 53% of non-public schools are now requiring that teachers demonstrate technology skills for employment at their schools.

Data on the number of students participating in distance learning were collected for the first time this year, and revealed that 7481 (1%) of the state's public school students and 2947 (3%) of non-public school students participated. Most were taking courses via Web-based learning and telelearning. A smaller number participated in satellite classes. The percentages of schools with students who participate in distance learning and the percentages of teachers who participate in distance learning both showed rather large decreases in both 1999 and 2000. However schools and districts are providing other resources. Public schools budgeted a total of $4,349,286.39 for technology, which included computer hardware and other peripherals, software, professional development, telecommunications, networking, distance learning, and service and support. Non-public schools budgeted $4,685,049.11 for technology. At the district levels, public school technology budgets totaled $64,672,958 and non-publics totaled $2,122,623. In addition, technology coordinators reported the dollar value of their E-rate discounts to be $33,833,413 for the 1999-2000 school year.

Long-range planning for technology has been instrumental to the tremendous gains since the statewide technology initiatives began in 1997. Since long-range District Technology Plans were required in the Application for CBTF/TLCF funds, 100% of the districts have had them for several years. In 1999-2000 however, 63% or public districts revised their plans, as well as 73% of the dioceses and non-public schools. Table 1 contains data from four years of technology surveys.

The Evaluation of Training Form was designed to provide feedback on all technology training sessions that occurred during the 1999-2000 school year. In reality it was not available on-line until January 2000, but some presenters did post results of sessions occurring before that. Data show that 1,343 professional development sessions were presented in Louisiana involving 12,755 participants, of which 10,837 were teachers.

Sessions were in the categories of: LA INTECH, Integration of Technology, Application Software/Skills Training, Technical Support Training, and Administrative Training/Issues. Ratings on the overall effectiveness of training sessions on a scale of 5 to 1, (5= Excellent and 1= Did not meet expectations) provided mean scores of 4.64 for public school teachers and 4.68 for non-public school teachers, indicating that participants were very pleased with the sessions. Table 2 furnishes further details.

End of Year Reports were revised for the 1999-2000 surveys to better match USDE on-line surveys that request the same data, and were completed by districts, dioceses, non-public schools, and consortia receiving professional development grants. As school systems aligned their goals, measures, and results with the six objectives in the state technology plan and the four national goals, it was obvious that their accomplishments were impressive. More districts and schools chose to gauge goal attainment with student achievement measures than in previous years.

School systems, both public and non-public, had plans for equipping their buildings with technology, connecting to the Internet, creating learning environments rich in technology, and providing staff development for teachers, administrators, and staff, especially INTECH Training. This year, more districts and schools chose to measure progress with student standardized test scores and other measures important in the state, such as LEAP and GEE scores and State Accountability Plan measures. Towards this end, more school systems planned to integrate technology into the curriculum, incorporate state content standards into local curricula, and hire and train facilitators to assist teachers in that process. There was increased interest in implementing policies concerning ethical and legal issues.

Districts and schools sought more and better partnerships with businesses, foundations, and other governmental agencies and funds, such as 8(g), E-rate, Title I and Special Education. They promoted public awareness through press coverage, presentations to school boards and community groups, and developed school and district Web pages for disseminating news and providing schedules, assignments, report cards, courses, and links to sites of interest to educators. On the rubrics (5 point scale) measuring attainment of the four National Goals, mean scores increased over the 1999 results for public schools on all four goals. Non-public schools' mean score decreased for Goal 1, but increased on all others.

Professional Development Grants were offered to consortia of districts, dioceses and universities on a competitive basis. With these funds, five additional regional training centers, known as Teaching, Learning, and Technology Centers (TLTCs), were established, bringing the total to nine. At these centers, 2222 educators participated in LA INTECH, evaluation, technical support and other sessions, dramatically increasing the number of educators trained and maximizing the moneys spent on professional development.

The Louisiana Technology Initiative for 1999-2000 has demonstrated a significant gain compared to previous years. In the first three years, the Initiative was very successful in placing technology into classrooms, and providing rich resources and basic introductory training for faculties and staffs. In this fourth year, tremendous gains have been made in professional development of all educators for integrating technology into curricula and for using that training as a reform agent for all teaching and learning in Louisiana. State accountability plan measures, especially student achievement scores, appeared in plans and goals more than ever before, indicating that many districts and schools have the hardware and trained personnel in place, and are now focusing of real changes in teaching and improvements in student performances.

The Governor, Legislature, Board of Elementary and Secondary Education, Louisiana Department of Education, Louisiana Center for Educational Technology and participating businesses and industry are to be applauded for their vision, leadership, funding, and active support of this Initiative. The school children of Louisiana are the benefactors of this continuing program, and in subsequent years, the State at large. In order for this Initiative to support the State Accountability Plan, the stakeholders must continue to fund purchases of hardware and software, provide facilities, opportunities and funding for professional development and ensure that universities provide pre-service teacher education programs and partnerships with practicing teachers that ensure appropriate content area knowledge and skills to integrate technology into the curricula.

RECOMMENDATIONS

1. LCET and the Louisiana Department of Education should make optimum use of the comprehensive databases of information collected from the on-line surveys completed this year. By continuing to develop queries, new insights can be made into causes and correlations that did or could affect the attainment of state and national technology goals.

2. Duplicate copies of data collected from school and district technology coordinators should be made available to them. The coordinators should be encouraged to study and use these data for determining deficiencies, areas of need, and efficient budgeting of future Technology Initiative funds. If necessary, workshops should be designed for teaching participants how to develop queries and analyze the results. This would enable local planning teams to better focus on explicit needs of their districts or schools, as well as help to efficiently accomplish state and national technology goals.

3. The impact of the LA INTECH model as a school reform agent has increased impressively with this year's initiative, as evidenced by the large percentage of goals involving this strategy. To accelerate that impact, schools and districts should be encouraged to forge stronger ties with universities to improve professional development, especially in the areas of technology, mathematics, and science. University professors in math and science could partner with schools and work with K-12 teachers to improve basic knowledge and teaching in those fields.

4. To help practicing teachers improve knowledge of content areas they are teaching as well as technology skills for improving teaching and learning, the Louisiana Department of Education should provide additional money for tuition, substitute teachers, travel, and other resources, as well as release time for professional development. Lack of funds for these purposes was cited as a major problem in many *End Of Year Reports.*

5. All colleges and departments of education should include their faculties in professional development to ensure that pre-service teachers are technology literate and ready to appropriately use technology when they enter the classroom.

6. LCET should continue to provide the means and training for programs that are especially suited to, or only possible through, technology. This would include the distance learning projects, such as the Louisiana Virtual Classroom, Internet courses and degree programs for educators, and on-line databases and services that are offered free to teachers and students through state contracts with the providers.

7. Applicants for CBTF/TLCF funds must be encouraged to develop more measurable goals, and make sure that measures and results relate to those goals. They should be encouraged to measure goal attainment with student achievement indicators whenever possible or relevant. Some may need assistance in this area during the Review Process.

8. The Legislature needs to continue to fund the Classroom Based Technology Fund (CBTF). The student to computer ratio is now near the national goal of 5.0:1 statewide, but far below it in many districts, schools, and classrooms. Rural areas are especially needy. Also, moneys needed to maintain and update the present technology must come from state appropriations and could be included in the CBTF funding.

9. The State Department of Education should continue to seek TLCF grants and other federal funds to supplement the CBTF moneys from the state. The Louisiana Technology Initiative is beginning to make measurable differences not only in the integration of technology into curricula, but in the state's school reform efforts as well, through the professional development activities funded primarily with the federal funds. Continuation of these efforts at this point is crucial.

10. Professional development of educators must continue, not only in technology, but for upgrading content area knowledge, especially at the lower grade levels where schools are linking Technology Initiatives to Accountability efforts. Partnerships with state and national initiatives and funding projects should be continued and increased to accomplish this huge task. The technology initiative should become a primary partner in State Accountability Plan activities at the district and school levels.

APPENDIX A

Louisiana's Classroom-Based Technology Fund and Technology Literacy Challenge Fund Application Packet for Technology Improvement Grants - 1999-2000

APPENDIX B

Louisiana's Technology Literacy Challenge Fund Application Packet for Professional Development Grants - 1999-2000

APPENDIX C

1999-2000 Classroom-Based Technology Allocations - Public Schools

1999-2000 Classroom-Based Technology Carryover Funds
- Public Schools

APPENDIX D

1999-2000 Technology Literacy Challenge Fund Allocations

APPENDIX E

1999-2000 Classroom-Based Technology Allocations - Non-Public Schools

1999-2000 Classroom-Based Technology Carryover Funds - Non-Public Schools

APPENDIX F

The Louisiana District Technology Survey - 1999-2000

APPENDIX G

The Louisiana School Technology Survey - 1999-2000

APPENDIX H

Evaluation of Training Form - 1999-2000

APPENDIX I

End of Year Report for Districts and State Schools - 1999-2000

APPENDIX J

End of Year Report for Non-Public Schools - 1999-2000

APPENDIX K

End of Year Report for Consortia - 1999-2000

Appendix L

Results of Louisiana School Technology Survey - 1999-2000

Appendix L

	Public Schools	Non-Public Schools
Louisiana School Technology Survey 1999-2000 **Results for Public and Non-Public Schools**		
Item	**Public Schools**	**Non-Public Schools**
State Technology Goal		
1. Percent of schools having Internet Access	94%	98%

1a. Type of Internet connection in schools:
       Direct Link
       Phone Modem (Dial-Up Link in 1998 and 1999)
       Satellite
	
	91%
	9%
	0%
		
		77%
		22%
		1%

1b. Bandwidth capacity for Direct Link.
       56kb
       T1
       ADSL
       T3
       Cable modem
       ISDN
       Other
	
	14%
	71%
	0.%
	1.%
	2%
	2%
	0%
		
		10%
		34%
		6%
		0%
		5%
		32%
		0%

2a. Average number of rooms in each category per school.
       Instructional rooms
       Instructional rooms, computer labs, and Library/Media
       Centers
	
	31.14
	
	33.95
		
		22.91
		
		25.67

2b. Average number of rooms with Internet access per school.
       Instructional rooms
       Instructional rooms, computer labs, and Library/Media
       Centers
	
	17.29
	
	19.52
		
		12.67
		
		14.86

2c. Average number of "all types" computers in each category per school.
       Instructional rooms
       Instructional rooms, computer labs, and Library/Media
       Centers
	
	49.12
	
	86.56
		
		32.57
		
		68.55

2d. Average number of PowerPC/Pentium class computers in each category per school.
       Instructional rooms
       Instructional rooms, computer labs, and Library/Media
       Centers
	
	30.82
	
	57.63
		
		22.47
		
		50.55

2e. Average number of computers with Internet access in each category. per school.
       Instructional rooms
       Instructional rooms, computer labs, and Library/Media
       Centers
	
	23.82
	
	45.68
		
		19.70
		
		46.21

3. Percent of schools that can be accessed via the Internet.	55%	58%

Item	Public Schools	Non-Public Schools
3a. Percents of schools where each type of information that can be accessed via the Internet. *		
Schedules	11%	19%
Homework Assignments/Help	10%	15%
Report Cards/Attendance	4%	0.4%
Community Information	24%	32%
Teacher/School Information	49%	54%
Courses	10%	21%
Other	27%	34%
*Total exceeds 100% due to multiple responses		
National Technology Goal 1		
4. Percent of schools with a **school-based person** responsible for providing teachers with support and assistance in integrating technology into the curriculum.	53%	81%
Position is Full-time	13%	39%
Position is Part-time	87%	61%
Part-time position held by full-time teacher, duties are above teaching responsibilities.	83%	77%
5 Percent of schools with a person **not school-based** who is responsible for providing teachers with support and assistance in integrating technology into the curriculum	80%	35%
Person is:		
District Staff	78%	18%
School level Support/Classified Staff	3%	3%
School level Licensed/Certificated Staff	2%	0.8%
Library/Media Specialist	3%	2%
Contractual Agreement	7%	8%
Students	0.3%	0.8%
Parents/Community members	2%	13%
Regional Centers	7%	5%
6. Percent of schools having a **school-based** person who is responsible for technical maintenance and/or support of hardware. *	38%	68%
Position is Full-time	12%	39%
Position is Part-time	88%	61%
Part-time position held by full-time teacher, duties are above teaching responsibilities**	86%	68%

Item	Public Schools	Non-Public Schools
7. Percent of schools with a person **not school-based** who is responsible for providing teachers with support and assistance in integrating technology into the curriculum*	86%	55%
Person is: *		
District Staff	79%	8%
School level Support/Classified Staff	3%	2%
School level Licensed/Certificated Staff	1%	0.8%
Library/Media Specialist	2%	2%
Contractual Agreement	21%	33%
Students	0.7%	1%
Parents/Community members	2%	23%
Regional Centers	1%	0.8%
8. Percent of schools that offer professional development for upgrading technology and computer skills.	85%	93%
8a. Percent of professional development by each provider:*		
School	54%	67%
District/parish	66%	53%
State	9%	19%
Region	17%	27%
University/Other	12%	19%
* Total exceeds 100% due to multiple responses.		
9. Number of teachers per school participating in training in the integration of technology in instruction.		
None	2.96	2.64
1-5 hours	9.3	8.81
6-8 hours (1 day)	5.86	9.21
7 day LA INTECH	1.84	2.82
45 hour university course	0.58	0.33
9. Percent of schools offering release time to teachers for training in the integration of technology in instruction.	54%	72%
10a. Average number of hours of release time offered to teachers for training in the integration of technology in instruction.		
For schools offering release time	43.74	33.85
For all schools in state	22.45	24.34

Item	Public Schools	Non-Public Schools
10. Percent of teachers and school administrators skill levels in use of technology.		
Teachers		
Non-User	7%	5%
Beginner	33%	24%
Intermediate	44%	48%
Advanced	12%	16%
Instructor	4%	5%
School Administrators		
Non-User	5%	4%
Beginner	28%	17%
Intermediate	46%	45%
Advanced	17%	30%
Instructor	4%	4%
12. Average number of educators per school who participated in professional development provided by the school.		
Teachers (average per school)		
Introduction-Basic Computer Literacy	5.32	7
Administrative Training Issues	1.26	1.38
Technical Support Training	1.78	2.42
Application Software/Skills Training	11.26	13.70
Integration of Technology	9.18	10.55
Louisiana INTECH	1.39	1
Assistive Technology Training	0.33	0.43
School Administrators (average per school)		
Introduction-Basic Computer Literacy	0.35	0.77
Administrative Training Issues	0.36	0.86
Technical Support Training	0.15	0.47
Application Software/Skills Training	0.75	1.41
Integration of Technology	0.42	0.89
Louisiana INTECH	0.06	0.07
Assistive Technology Training	0.02	0.16
13. Percent of schools requiring teachers to demonstrate technology skills for employment.	63%	53%
14. Percent of teachers who address technology skills in their individual professional development plans.	11%	18%
National Technology Goal 2		
15. Percent of schools that have at least one computer in every instructional room.	11%	18%
16. Percent of schools that have at least one <u>Power PC/Pentium class multimedia</u> computer in every instructional room.	38%	38%
16a. For those who answered "No" to 16, average number of rooms per school that <u>do not</u> have at least one <u>Power PC/Pentium class multimedia</u> computer in every instructional room.	9.32	6.80

Item	Public Schools	Non-Public Schools
17. Laptops that are available for teacher and/or student use:		
Total available	1759	1577
Average number per school	1.2	6.51
17.a. Laptops that have Internet access:		
Total available	851	1392
Average number per school	0.58	5.75
18. Computers purchased with **school** funds:		
Total	3018	2013
Average number per school	2.06	8.31
19. Percent of schools using appropriate Assistive Technology Devices to accommodate students with disabilities.	51%	33%
National Technology Goal 3		
20. Percent of schools with teachers who participate in Distance Learning.	14%	15%
21. Percent of schools that have at least one computer with Internet access in EVERY instructional room.	63%	67%
21a. Average number of instructional rooms that <u>do not</u> have at least one computer with Internet Access.	12.37	9.28
22. Percent of schools that provide email accounts for teachers.	66%	61%
23. Percent of schools that provide email accounts for students.	4%	10%
24. Percent of schools connected to computers in other classrooms, labs, media centers, and/or offices through a LAN (local area network).	72%	75%
25. Percent of schools connected to another school schools through a WAN (wide area network).	61%	13%
National Technology Goal 4		
26. Percent of schools that provide Internet access to educators at home.	17%	9%
27. Percent of schools with students participating in Distance Learning.	10%	10%
27a. For those who responded "Yes" for 27, average number of students per school participating in Distance Learning.	5.11	12.93
28. Number of students taking courses in Distance Learning, per method :		
Satellite,	1267	480
Interactive Video (Compressed)	1219	60
Web-Based	2529	1070
Telelearning	1817	123
TOTAL	6832	1733

Item	Public Schools	Non-Public Schools
29. Percent of schools where teachers utilize web resources for instructional support and activities. *	90%	95%
School Web Page	27%	35%
District Web Page	46%	18%
Louisiana Department of Education Web site	73%	57%
LA Department of Education Making Connections site	47%	29%
Louisiana Challenge Web site	26%	24%
On-line libraries/databases	66%	75%
Other Web sites	83%	90%
30. Percent of schools that purchased software for use in instructional rooms.	76%	86%
31. Percent of schools that have license agreements for each piece of software purchased for school use.	82%	91%
State Requirements - Long Range Planning		
32. Percent of schools having a School Technology Plan.	86%	93%
Technology Plan written for:		
1 year	16%	4%
2-4 years	47%	45%
5 or more years	37%	51%
Technology plan last reviewed		
1997	18%	31%
1998	14%	9%
1999	47%	51%
2000	21%	31%
Technology plan last revised		
1997	22%	14%
1998	15%	12%
1999	43%	43%
2000	20%	31%
Technology plan provides for staff training in: *		
Software licensing	37%	38%
Copyright laws and issues	33%	38%
Internet Filtering	34%	50%
Acceptable Use Policies	76%	83%
33. Percent of schools that have a school budget for technology.	24%	71%

Item	Public Schools	Non-Public Schools
33a. Total amounts budgeted in school budgets:		
Computer Hardware/Peripherals	$ 2,769,275	$ 1,970,964.95
Software	569,224	563,574.49
Professional Development	275,001	325,152.00
Telecommunications *(Internet, Long Distance, etc.)*	95,802	509,709.75
Networks	115,941	308,803.00
Distance Learning *(Cable TV, Satellite, etc.)*	12,340	4,616.00
Service/Support	196,850	518,283.88
Other *(including supplies)*	314,852	483,945.04
Total School Technology Budget	**$ 4,349,286**	**$ 4,685,049.11**

* Total exceeds 100% due to multiple responses

APPENDIX M

Comparison of District Technology Survey - 1997-2000

A Comparison Of 1997-98 and 1998-99 QED Data for Public Schools and 1999-2000 Louisiana District Technology Survey				
Item	**1997-98**	**1998-99**	**1999-2000**	**1999-2000**
State Technology Goal			Public	Non-Public
1. Percent of administration buildings having access to the Internet.	92%	100%	99%	100%

1a. Type of Internet connection in administration buildings:
      Direct Link
      Phone Modem
      Satellite
	
	57%
	32%
	11%
		
		86%
		14%
		*
			
			99%
			2%
			0%
				
				71%
				29%
				0%

1b. Bandwidth capacity for Direct Link
      56kb
      T1
      ADSL
      T3
      Cable modem
      ISDN
      Other
	
	17%
	32%
	*
	*
	3%
	*
	*
		
		24%
		64%
		1%
		1%
		3%
		*
		6%
			
			6%
			88%
			0%
			3%
			0%
			0%
			0%
				
				0%
				20%
				0%
				0%
				20%
				60%
				0%

3. Percent of districts where information can be accessed from an outside location via the Internet .**
      District Calendar
      Information on School Board Members
      School Board Agenda and Minutes
      Information on District Staff
       District Newsletter
      On-line courses
      Other
	
	27%
	30%
	5%
	32%
	8%
	*
	13%
		
		47%
		40%
		14%
		47%
		7%
		*
		28%
			
			54%
			55%
			15%
			56%
			15%
			4%
			55%
				
				43%
				0%
				0%
				43%
				14%
				0%
				86%

4. Percent of districts that have an Intranet (district-wide Internet) for communication within the district (described as a WAN (Wide Area Network) in 1998 and 1999 surveys.	69%	76%	79%	29%
5. Percent of district providing Distance Learning for students.	77%	80%	65%	57%

5b.. Percent of districts providing each type of Distance Learning to students:
      Satellite
      Interactive Video (compressed)
      Web-based
      Telelearning
	
	*
	*
	*
	*
		
		*
		*
		*
		*
			
			44%
			14%
			8%
			37%
				
				0%
				14%
				14%
				43%

* No data available as same question was not asked. **Total exceeds 100% due to multiple responses				

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National Technology Goal 1				
6. Percent of districts having anyone responsible for providing teachers with support and assistance in integrating technology into the curriculum.	. 88%	100%	96%	100%
Percent of Full-time persons	62%	62%	56%	44%
Percent of Part time persons	38%	3%	95%	5%
7. Percent of districts having anyone responsible for providing technical maintenance and/or support of hardware.	*	*	87%	43%
Percent of Full-time persons	*	*	61%	39%
Percent of Part time persons	*	*	33%	67%
8. Percent of districts providing professional development in instructional technology:****				
INTECH Courses	*	*	85%	57%
During school Workshops	*	*	72%	57%
After School Workshops	*	*	90%	71%
Saturday Workshops	*	*	73%	57%
Conferences	*	*	70%	43%
Site Visitations	*	*	50%	57%
Individual Tutorials	*	*	41%	29%
Video/CD Tutorials	*	*	25%	29%
On-line Tutorials	*	*	18%	0%
Summer Institutes	*	*	46%	43%
University Courses	*	*	38%	29%
Mentoring	*	*	45%	29%
On-line Communications	*	*	28%	14%
Teaching, Learning, and Technology Center Workshops	*	*	63%	57%
9. Hours per school year each district offers professional development during the 1999-2000 school year for each employee group to learn or upgrade technology and computer skills.				
Teachers (total hours)**				
Introduction-Basic Computer Literacy	*	*	2133	44
Administrative Training Issues	*	*	521	46
Technical Support Training	*	*	1499	19
Application Software/Skills Training	*	*	6173	112
Integration of Technology	*	*	4019	728
Louisiana INTECH	*	*	27213	348
Assistive Technology Training				

* No data available as same question was not asked.

** In 1998-99 results were reported as average hours per school district.

*** In 1997-98 districts responded to number of days per year district offered professional development in technology for staff members. The subcategories were not included.

**** Total exceeds 100% due to multiple responses

School Administrators (total hours)****				
Introduction-Basic Computer Literacy	*	*	2377	37
Administrative Training Issues	*	*	791	56
Technical Support Training	*	*	296	22
Application Software/Skills Training	*	*	1352	70
Integration of Technology	*	*	565	634
Louisiana INTECH	*	*	3149	295
District Administrators (total hours)****				
Introduction-Basic Computer Literacy	*	*	634	12
Administrative Training Issues	*	*	508	66
Technical Support Training	*	*	522	8
Application Software/Skills Training	*	*	948	14
Integration of Technology	*	*	331	246
Louisiana INTECH	*	*	2479	12
10. Percent of districts requiring teachers to demonstrate technology skills for employment.	3%	7%	2%	43%
10a. Percent of districts using each type of evaluation of teachers' technology skills:				
Transcripts	*	*	100%	100%
Hands-on Evaluation	*	*	0%	67%
Professional Development hours	*	*	0%	67%
Other	*	*	0%	100%
11. Percent of districts offering release time to teachers for technology training.	*	100%	79%	71%
2 days or less	*	56%	22%	2%
3 - 5 days	*	29%	22%	2%
More than 5 days	*	15%	12%	1%
12. Percent of districts providing Distance learning opportunities for teachers.	*	69%	31%	0%
13. Percent of districts providing Internet services/access accounts to educators at their homes.	*	19%	23%	0%
National Technology Goal 2				
14. Percent of districts that have at least one computer in EVERY instructional room	*	*	26%	43%
15. Percent of districts that have at least one PowerPC/Pentium class computer in EVERY instructional room.	*	*	15%	14%

* No data available as same question was not asked.

**Total exceeds 100% due to multiple responses

***In 1997-98 districts responded to number of days per year district offered professional development in technology for staff members. The subcategories were not included.

**** In 1998-99 results were reported as average hours per school district.

16 Percent of districts that have classrooms that were developed based on the Model Classroom in the Louisiana State Technology Plan.	*	*	32%	0
Total Model Classrooms in the state	*	*	1801	0
17. Numbers of computers purchased with <u>district</u> funds.	*	*	4567	316
National Technology Goal 3				
18. Percent of districts having at least one computer with Internet access in EVERY instructional room.	*	*	23%	14%
19. Percent of districts that have administration building(s) and schools in the district connected to each other through a WAN (wide area network).	69%	76%	86%	14%
19a. Percent of districts providing Internet services through a WAN (wide area network). **	20.7	28.9	95%	0%
20. Percent of districts having ALL schools connected to a district WAN.	*	*	83%	14%
21. Percent of district Superintendents that communicate with schools through E-mail.	*	*	73%	100%
22. Percent of districts having a Compressed Video site. School-based / District-based	* / *	* / *	16% / 7%	0% / 0%
National Technology Goal 4				
23a. Percent of districts providing each type of distance learning for STUDENTS: Enrichment coursework via satellite / Required coursework via satellite / On-line projects / On-line Coursework / Interactive Video (compressed)	* / * / * / * / *	* / * / * / * / *	35% / 20% / 20% / 10% / 10%	0% / 0% / 14% / 0% / 0%
23b. Percent of districts providing each type of distance learning for TEACHERS:: Enrichment coursework via satellite / Required coursework via satellite / On-line projects / On-line Coursework / Interactive Video (compressed) / Professional Development / University courses	* / * / * / * / * / * / *	* / * / * / * / * / * / *	14% / 4% / 20% / 14% / 17% / 28% / 31%	0% / 0% / 14% / 0% / 0% / 0% / 0%

24. Percent of districts that have a person responsible for monitoring:				
Software Licensing	*	*	87%	72%
Copyright Issues	*	*	80%	57%
Internet Filtering	*	*	94%	72%
Acceptable Use Policies	*	*	96%	100%
25. Percent of districts providing training for the use of the Louisiana Department of Education's **Making Connections** Web site.	*	*	48%	43%
* No data available as same question was not asked. **In 1997-98 and 1998-99 data was reported as means.				

State Requirements - Long Range Planning				
26. Percent of districts that have a technology plan	100%	100%	99%	100%
Technology plan last reviewed				
1997	2%	4%	23%	0%
1998	51%	68%	6%	0%
1999	47%	28%	64%	57%
2000	*	*	23%	43%
Technology plan provides for staff training in:				
Software licensing	*	*	71%	57%
Copyright laws and issues	*	*	65%	43%
Internet Filtering	*	*	69%	43%
Acceptable Use Policies	*	*	96%	86%
Technology plan last revised				
1997	2%	4%	13%	0%
1998	51%	68%	9%	29%
1999	47%	28%	55%	29%
2000	*	*	23%	42%
Technology plan provides for staff training in:				
Software licensing	*	*	71%	57%
Copyright laws and issues	*	*	65%	43%
Internet Filtering	*	*	69%	43%
Acceptable Use Policies	*	*	96%	86%

<u>Percent of districts addressing each of the following components in their district technology plans.</u>				
Hardware/peripherals				
Computer Software	*	*	92%	100%
Internal Connections	*	*	96%	100%
Review Requirement	*	*	87%	43%
Staff Training	*	*	85%	100%
Curriculum Integration	*	*	93%	100%
Maintenance of Equipment	*	*	89%	100%
External Connections	*	*	85%	85%
Electrical Wiring	*	*	69%	0%
Personnel for Technical Assistance	*	*	71%	29%
Personnel for the Integration for Technology	*	*	79%	43%
	*	*	75%	72%

* No data available as same question was not asked.

27. Percent of districts using each type of funding for technology (multiple responses allowed):				
District Line Item Budget	**	**	65%	29%
Site Based Line Item Budget	**	**	34%	86%
Capital Funds	**	**	20%	14%
Loan(s)	**	**	3%	0%
Local Bonds	**	**	20%	0%
State Funds	**	**	90%	86%
State Bonds	**	**	6%	0%
Federal Funds	**	**	92%	86%
Grants	**	**	97%	100%
Vendor Contributions	**	**	24%	28%
Other	**	**	34%	0%

28. Total amounts budgeted in district budgets:				
Computer Hardware/Peripherals	**	**		
Software	**	**	$20,837,202	$14,118,800
Professional Development	**	**	$6,492,570	$294,851
Telecommunications *(Internet, Long Distance, etc.)*	**	**	$5,932,862	$186,811
	**	**	$6,683,033	$64,454
Networks	**	**		
Distance Learning *(Cable TV, Satellite, etc.)*	**	**	$10,578,755	$108,327
Service/Support	**	**	$363,513	$0
Other *(including supplies)*	**	**	$8,923,703	$51,000
	**	**	$4,861,320	$5,300
Total of District Technology Budgets				
			$64,672,958	$2,122,623

* No data available as same question was not asked.
**Data presented in a different format in previous years.

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29. Average number for each factor influencing the selection of schools that receive or benefit from CBTF or TLCF funds, (1 = Highest priority: and 8 = lowest priority).				
Low Socio-economic Area				
School Performance Scores	*	*	4.2	2.4
Teacher Interest	*	*	2.7	4.0
Collaboration with Other Grants (8g, NSF, etc.)	*	*	5.1	4.4
Administrative Support in the School	*	*	5.9	4.6
Teacher Training and Experience with	*	*	5.1	4.4
Technology	*	*	5.5	5.1
State Testing Programs (LEAP, CRT)				
Amount of Technology in the School	*	*	2.8	6.9
	*	*	4.7	4.1
30. Percent of districts that made provisions to include the **K-12 Technology Guidelines** in staff development sessions.	*	*	72%	28%
31. Percent of districts having technology proficiency requirements for students to matriculate to the next level	8%	14%	9%	43%
32. Percent of districts that are making provisions to encourage and include minority participation in staff development and other educational technology activities	*	*	80%	100%
33. Percent of districts that applied for the E-rate discount.	93%	97%	90%	43%
33a. Value of the E-rate discount for all districts Total value for all districts			$33,833,413	$184,296
* No data available as same question was not asked. **Total exceeds 100% due to multiple responses.				

APPENDIX N

Four National Pillars – Mean Scores

Table 5				
Means of Districts/Schools Fulfilling the Four National Pillars				
Pillar/Goal	**Public**		**Non-Public**	
	1999	2000	1999	2000
1. All *teachers* in the nation will have the training and support they need to help all students learn through computers and through the information superhighway. 1 = No members of <u>teaching workforce</u> participating in ongoing training & receiving support. 3 = Half of the teaching workforce participating in ongoing training & receiving support 5 = Entire teaching workforce participating in ongoing training & receiving support	**3.21**	**3.28**	**3.90**	**3.41**
2. All teachers and students will have modern multimedia computers in their classrooms. 1 = All classrooms with a student to multi-media computer ratio greater than 21:1 3 = All classrooms with a student to multi-media computer ratio of 13:1 5 = All classrooms with a student to multi-media computer ratio at or less than 5:1	**2.85**	**3.66**	**3.00**	**3.61**
3. Every *classroom* will be connected to the information superhighway. 1 = Less than 14% of classrooms connected to the information superhighway. 3 = 55% of classrooms connected to the information superhighway. 5 = All of classrooms connected to the information superhighway.	**3.69**	**4.06**	**3.29**	**4**
4. Effective and engaging software and on-line learning resources will be an integral part of the school's curriculum. 1 = Effective and engaging software and on-line learning resources not in use in any core content areas. 3 = Effective and engaging software and on-line learning resources in use in half of the core content areas. 5 = Effective and engaging software and on-line learning resources in use in all core content areas.	**3.11**	**3.49**	**3.03**	**3.32**

Appendix N

	Public Schools			Non-Public Schools		
Table 5 - Continued **Means of Districts/Schools Fulfilling the Four National Pillars in Year 2000**						
	Mean	**Std. Dev.**	**% of Group**	**Mean**	**Std. Dev.**	**% of Group**
1. All *teachers* in the nation will have the training and support they need to help all students learn through computers and through the information superhighway. 　1 = No members of <u>teaching workforce</u> participating in ongoing training & receiving support. 　3 = Half of the teaching workforce participating in ongoing training & receiving support 　5 = Entire teaching workforce participating in ongoing training & receiving support	**3.28**	**0.83**	**58%**	**3.41**	**1.12**	**61%**
2. All teachers and students will have modern multimedia computers in their classrooms. 　1 = All classrooms with a student to multi-media computer ratio greater than 21:1 　3 = All classrooms with a student to multi-media computer ratio of 13:1 　5= All classrooms with a student to multi-media computer ratio at or less than 5:1	**3.66**	**0.85**	**11:1**	**3.61**	**0.92**	**11:1**
3. Every *classroom* will be connected to the information superhighway. 　1 = Less than 14% of classrooms connected to the information superhighway. 　3 = 55% of classrooms connected to the information superhighway. 　5 = All of classrooms connected to the information superhighway.	**4.06**	**0.81**	**75%**	**4**	**1.15**	**75%**
4. Effective and engaging software and on-line learning resources will be an integral part of the school's curriculum. 　1 = Effective and engaging software and on-line learning resources not in use in any core content areas. 　3= Effective and engaging software and on-line learning resources in use in half of the core content areas. 　5 = Effective and engaging software and on-line learning resources in use in all core content areas.	**3.49**	**0.81**	**62%**	**3.32**	**0.85**	**59%**

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APPENDIX O

End of Year Report – 1999-2000

Louisiana Center for Educational Technology

EOY Report-Progress Toward Four Pillars
Computation of Percentages

Public

	Goal 1			Goal 2			Goal 3			Goal 4		
100 =5	100			5:1			100%			100%		
90												
80												
75 =4				9:1				4.06	75%			
70					3.66	11:1					3.49	62%
60		3.28	58%									
50 =3	50			13:1			55%			50%		
40												
30												
25 =2												
20												
10												
0 =1	0			21:1			>14%			0		

Non-Public

	Goal 1			Goal 2			Goal 3			Goal 4		
100 =5	100			5:1			100%			100%		
90												
80												
75 =4				9:1				4	75%			
70					3.61	11:1						
60		3.41	61%								3.32	59%
50 =3	50			13:1			55%			50%		
40												
30												
25 =2												
20												
10												
0 =1	0			21:1			>14%			0		

EXECUTIVE SUMMARY

The Louisiana Technology Initiative expended approximately $27,149,355 on technology and staff development in public and non-public schools during the 1999-2000 school year. Of this amount, $17,107,593 came from the Classroom Based Technology Fund (CBTF) and $10,592,272 from the Technology Literacy Challenge Fund (TLCF). The CBT funds were further divided, with $14,045,733 allocated directly to public schools, approximately $46,808 going to state special schools, $2,968,031 awarded to non-public schools. From the TLCF $4,197,620 awarded as Professional Development Grants to consortia of districts and/or Dioceses and universities. Four new Teaching, Learning, and Technology Centers were funded with these grants, making a total of nine TLTC centers that serve as regional extensions of LCET for training. Five percent of the $10,592,272 TLCF funds received from the USDE, approximately $529,614, was used for state level activities, mainly at the Louisiana Center for Educational Technology.

CBTF funds were distributed to districts and schools using an RFP procedure with allocations based on a per pupil basis. TLCF funds were competitively awarded to all districts based on high poverty need. Proposals were developed based on district/school technology plans that were approved by the state and which addressed the State Technology Goal and the four National Goals. Funds were primarily used for developing technology-rich instructional rooms, connecting to the Internet, purchasing software and computer peripherals, and conducing professional development activities. The professional development activities emphasized the integration of technology into curricula, aligning curriculum to state content standards through technology, and most were based on the LA INTECH model developed by the LCET staff.

In June 2000, the student to computer ratio for public schools was 5.5:1, when considering all types of computers. The state has reduced the ratio from 8:1 in 1997, and brought it very close to the National goal of 5 students to each computer. For the non-public schools the ratio was 6.3:1. When only high-end computers are considered, the ratio is 8.2:1 for public and 8.5:1 for non-public schools. The state has made remarkable progress in this area, decreasing the ratio from 48:1 for both public and non-public schools in 1997.

The percentage of computers with Internet access increased in 2000 to 54% from 49% in 1999 for public and to 69% from 61% for non-public schools. Ninety-four percent (94%) of the public schools and 97% of the non-public schools now have Internet access, almost doubling the rates in 1997. Internet connections via direct link increased from 76% to 91% for public and from 61% to 77% for non-public schools this year.

The percentage of public school teachers at the beginner level in using technology has dropped from 41% in 1999 to 33% in 2000; non-public beginners dropped from 37% to 24%. The intermediate levels of 41% and 37% respectively showed small gains, but advanced and instructor percentage levels dropped in both categories compared to last year. Concerning training and support for teachers, 91% of public and 87% of non-public schools reported having a person responsible for supporting teachers and assisting them with the integration of technology into the curriculum. The same percentages of schools,

91% public and 87% non-public, have a person who helps to maintain and support hardware and software in the schools. Sixty-three percent (63%) of public and 53% of non-public schools are now requiring that teachers demonstrate technology skills for employment at their schools.

Data show that 1,343 professional development sessions were presented in Louisiana involving 12,755 participants, of which 10,837 were teachers. Sessions were in the categories of: LA INTECH, Integration of Technology, Application Software/Skills Training, Technical Support Training, and Administrative Training/Issues. Ratings on the overall effectiveness of training sessions on a scale of 5 to 1, (5= Excellent and 1= Did not meet expectations) provided mean scores of 4.64 for public school teachers and 4.68 for non-public school teachers, indicating that participants were very pleased with the training sessions. LA INTECH, the state model for integrating technology into standards-based lessons, accommodated 2,081 public and 132 non-public school teachers. Each participant was trained to redeliver the model at the local level, and the standards-based lessons they developed were posted on LCET and TLTC Web pages. Courses for university credit were taken by 497 participants.

All districts in the state, 86% of public schools, and 93% of non-public schools have long-range technology plans. This year 63% of public districts and 73% of dioceses and non-public schools have revised their plans. Goals were increasingly targeted at student achievement, and are beginning to connect school accountability and reform to the technology initiative.

Local efforts for installing technology infrastructure and training educators to use it effectively to improve student achievement is quite evident in school and district technology budgets. Public schools budgeted a total of $4,349,286.39 for technology, which included computer hardware and other peripherals, software, professional development, telecommunications, networking, distance learning, and service and support. Non- public schools budgeted $4,685,049.11 for technology. At the district levels, public school technology budgets totaled $64,672,958 and non-publics totaled $2,122,623. In addition, technology coordinators reported the dollar value of their E-rate discounts to be $33,833,413 for the 1999-2000 school year.

The Louisiana Technology Initiative for 1999-2000 has demonstrated a significant gain compared to previous years. In the first three years, the Initiative was very successful in placing technology into classrooms, and providing rich resources and basic introductory training for faculties and staffs. In this fourth year, tremendous gains have been made in professional development of all educators for integrating technology into curricula and for using that training as a reform agent for all teaching and learning in Louisiana. State accountability plan measures, especially student achievement scores, appeared in plans and goals more than ever before, indicating that many districts and schools have the hardware and trained personnel in place, and are now focusing of real changes in teaching and improvements in student performances.

The Governor, Legislature, Board of Elementary and Secondary Education, Louisiana Department of Education, Louisiana Center for Educational Technology and participating

businesses and industry are to be applauded for their vision, leadership, funding, and active support of this Initiative. The school children of Louisiana are the benefactors of this continuing program, and in subsequent years, the State at large. In order for this Initiative to support the State Accountability Plan, the stakeholders must continue to fund purchases of hardware and software, provide facilities, opportunities and funding for professional development and ensure that universities provide pre-service teacher education programs and partnerships with practicing teachers that ensure appropriate content area knowledge and skills to integrate technology into the curricula.